SONY

DATA PROJECTOR

VPL-ES1

REMOTE COMMANDER
RM-PJ2

SERVICE MANUAL
1st Edition

⚠警告

このマニュアルは，サービス専用です。
お客様が，このマニュアルに記載された設置や保守，点検，修理などを行うと感電や火災，人身事故につながることがあります。
危険をさけるため，サービストレーニングを受けた技術者のみご使用ください。

⚠WARNING

This manual is intended for qualified service personnel only.
To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

⚠WARNUNG

Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.
Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegeben Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

⚠AVERTISSEMENT

Ce manual est destiné uniquement aux personnes compétentes en charge de l'entretien. Afin de réduire les risques de décharge électrique, d'incendie ou de blessure n'effectuer que les réparations indiquées dans le mode d'emploi à moins d'être qualifié pour en effectuer d'autres. Pour toute réparation faire appel à une personne compétente uniquement.

WARNING!!

AN INSULATED TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY A ⚠ MARK ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

ATTENTION!!

AFIN D'ÉVITER TOUT RISQUE D'ÉLECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE.
LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ Á L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS Á LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MAPQUE ⚠ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIÉS DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

For the customers in the Netherlands
Voor de klanten in Nederland

Hoe u de batterijen moet verwijderen, leest u in de tekst van deze handleiding.

Gooi de batterij niet weg maar lever deze in als klein chemisch afval (KCA).

Für Kunden in Deutschland

Entsorgungshinweis: Bitte werfen Sie nur entladene Batterien in die Sammelboxen beim Handel oder den Kommunen. Entladen sind Batterien in der Regel dann, wenn das Gerät abschaltet und signalisiert "Batterie leer" oder nach längerer Gebrauchsdauer der Batterien "nicht mehr einwandfrei funktioniert". Um sicherzugehen, kleben Sie die Batteriepole z.B. mit einem Klebestreifen ab oder geben Sie die Batterien einzeln in einen Plastikbeutel.

Table of Contents

1. Service Overview

1-1. Appearance Figure 1-1
1-2. Board Locations 1-1
1-3. Disassembly 1-2
1-3-1. Top Panel Assembly 1-2
1-3-2. H Board 1-2
1-3-3. C Board 1-3
1-3-4. Lens Gear 1-4
1-3-5. Fan Holder 1-4
1-3-6. D.C. Fan (60mm) and D.C. Fan (70mm) 1-5
1-3-7. Lamp House 1-5
1-3-8. Optics Block Assembly 1-6
1-3-9. Prism Block Assembly 1-6
1-3-10. Incidence Polarizer (R), (G), (B) 1-7
1-3-11. Side Panel Assembly-1 1-8
1-3-12. Side Panel Assembly-2 1-9
1-3-13. G Board 1-10
1-3-14. Lamp Power Supply 1-10
1-3-15. D.C. Fan (Sirocco/For Lamp) 1-11
1-3-16. D.C. Fan (Sirocco) 1-12
1-3-17. Adjuster Block Assembly 1-13
1-4. Warning on Power Connection 1-14

2. Electrical Adjustments

2-1. Preparation 2-1
2-1-1. Required Equipment 2-1
2-1-2. Opt Unit Adjustment 2-1
2-1-3. How to Enter the Factory Mode 2-2
2-2. V COM Adjustment 2-2
2-3. Initial Values of Adjustment Items 2-3
2-4. Service Know-How 2-8
2-4-1. When the S Prism Block Is Replaced 2-8
2-4-2. When the C Board Is Replaced 2-8
2-5. White Balance Adjustment 2-9
2-5-1. HIGH Mode of INPUT-A 2-9
2-5-2. LOW Mode of INPUT-A 2-9
2-5-3. HIGH Mode of VIDEO 2-9
2-5-4. LOW Mode of VIDEO 2-9
2-6. Memory Structure 2-10

3. Semiconductors 3-1

4. Spare Parts

4-1. Notes on Repair Parts 4-1
4-2. Exploded Views 4-2
4-3. Electrical Parts List 4-6

5. Block Diagrams

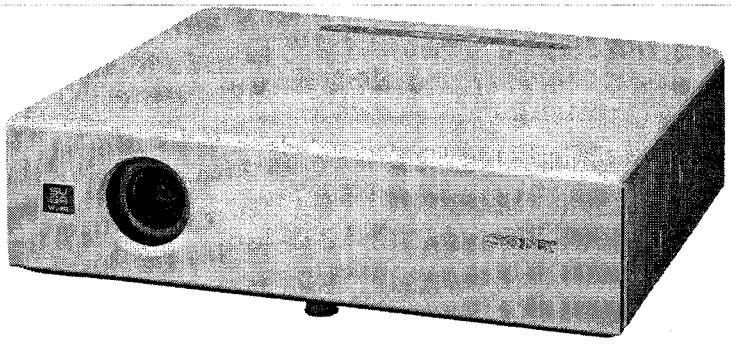
C 5-1
G, H, V, L, NR 5-2

6. Diagrams

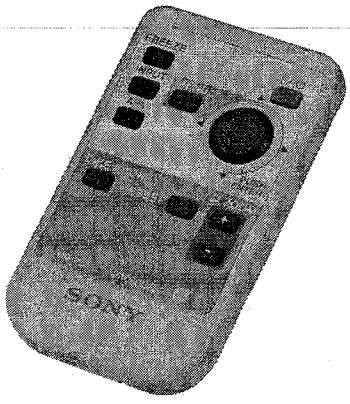
6-1. Frame Wiring 6-2
Frame Wiring 6-2
6-2. Schematic Diagrams and Board Layouts 6-3
Schematic Diagrams
Q 6-3
C (1/10) 6-6
C (2/10) 6-7
C (3/10) 6-8
C (4/10) 6-9
C (5/10) 6-10
C (6/10) 6-11
C (7/10) 6-12
C (8/10) 6-13
C (9/10) 6-14
C (10/10) 6-15
V 6-14
H 6-18
L 6-19
NR 6-19
G (1/2) 6-21
G (2/2) 6-22
Board Layouts
Q 6-3
C 6-4
V 6-14
H 6-18
L 6-19
NR 6-19
G 6-20

Section 1
Service Overview

1-1. Appearance Figure

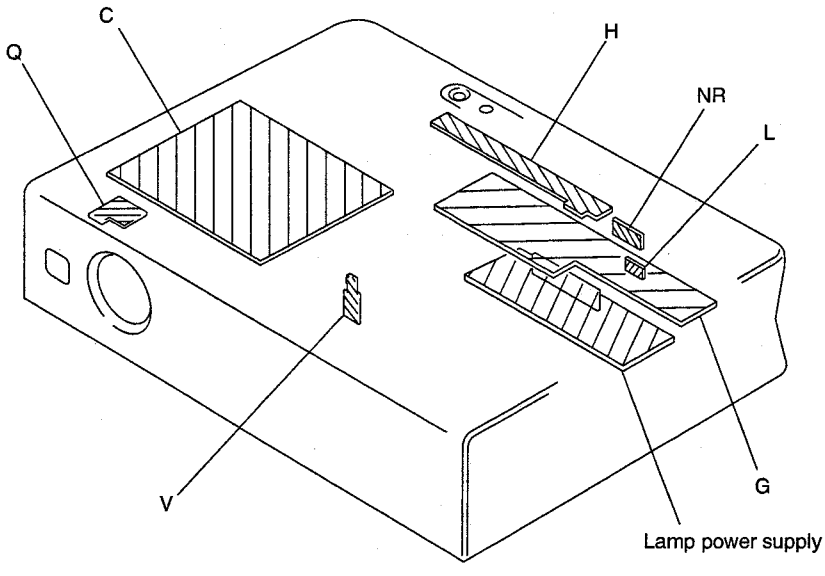


VPL-ES1



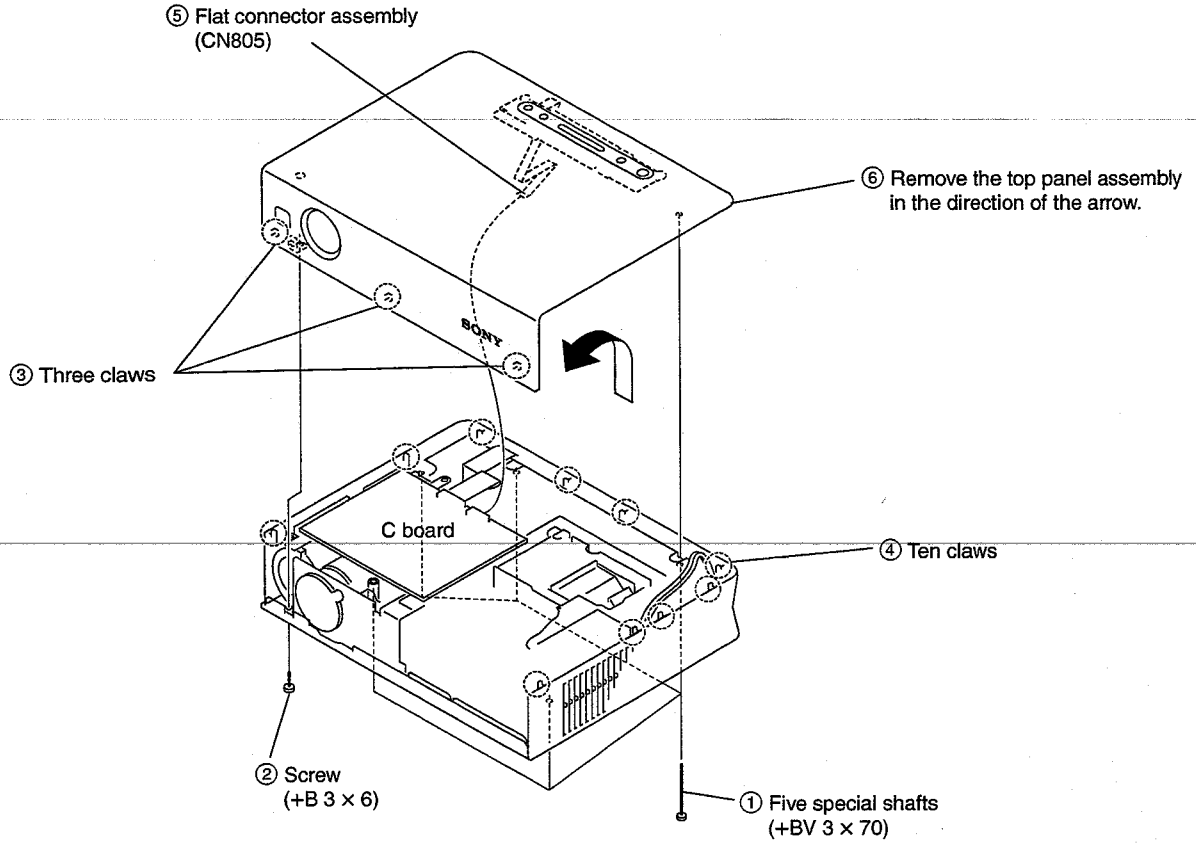
RM-PJ2

1-2. Board Locations



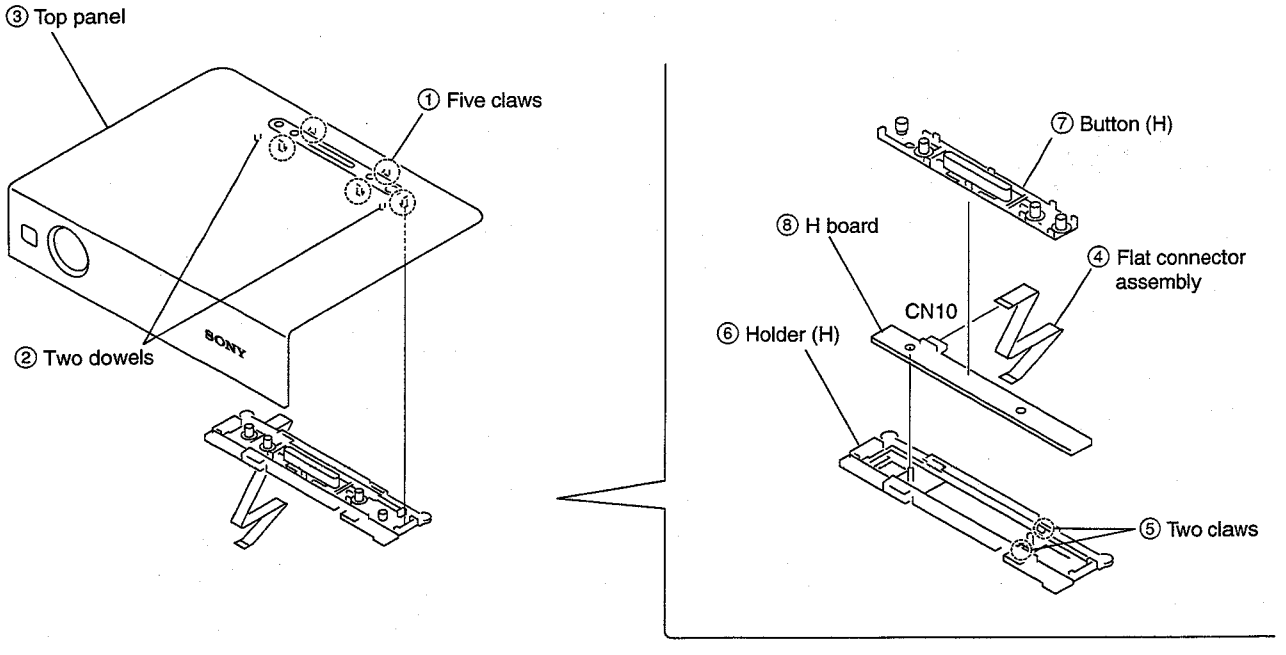
1-3. Disassembly

1-3-1. Top Panel Assembly

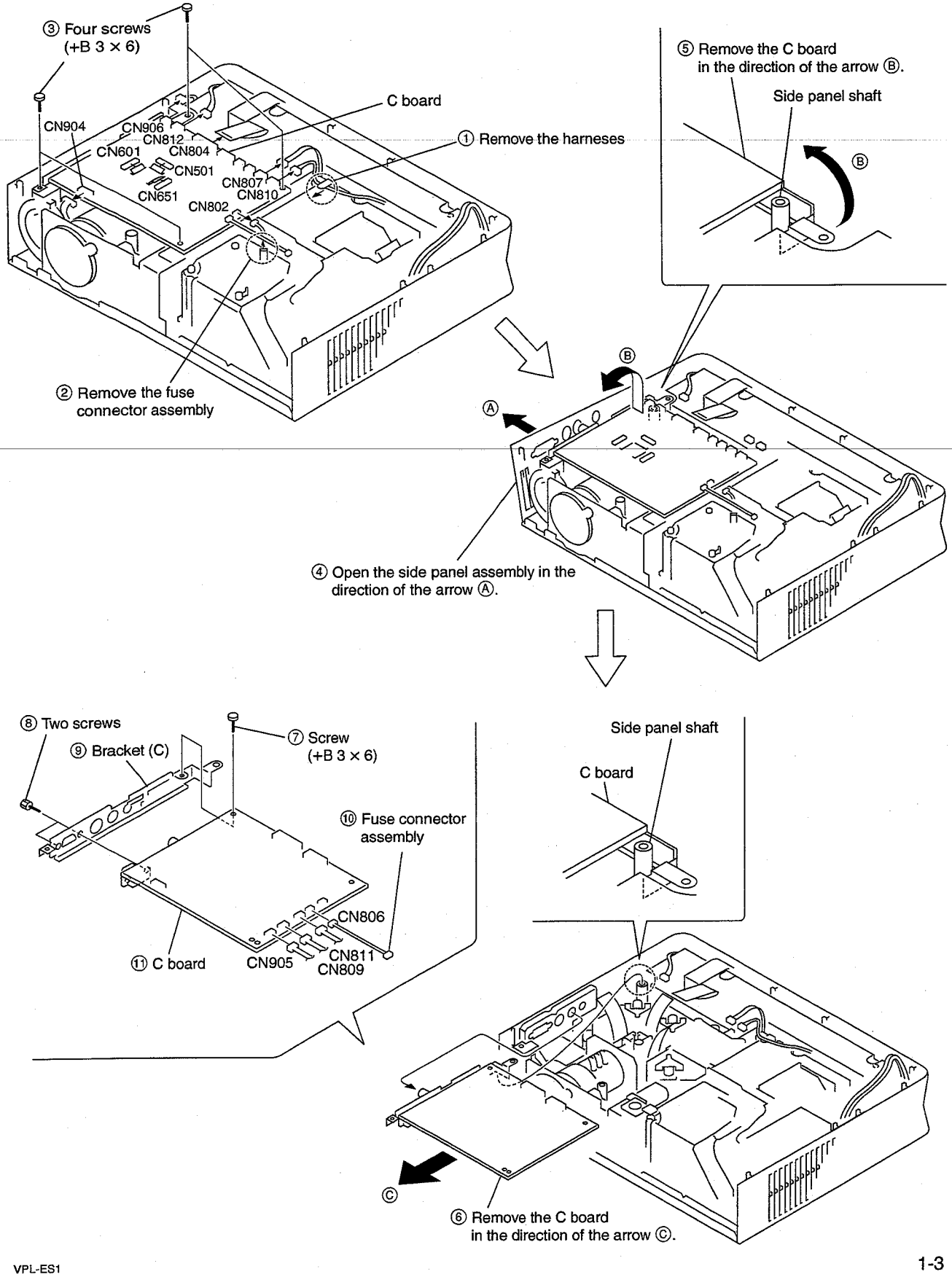

⑤ Flat connector assembly (CN805)
⑥ Remove the top panel assembly in the direction of the arrow.
③ Three claws
C board
④ Ten claws
② Screw (+B 3 × 6)
① Five special shafts (+BV 3 × 70)

1-3-2. H Board

• Remove the top panel assembly. (Refer to 1-3-1.)

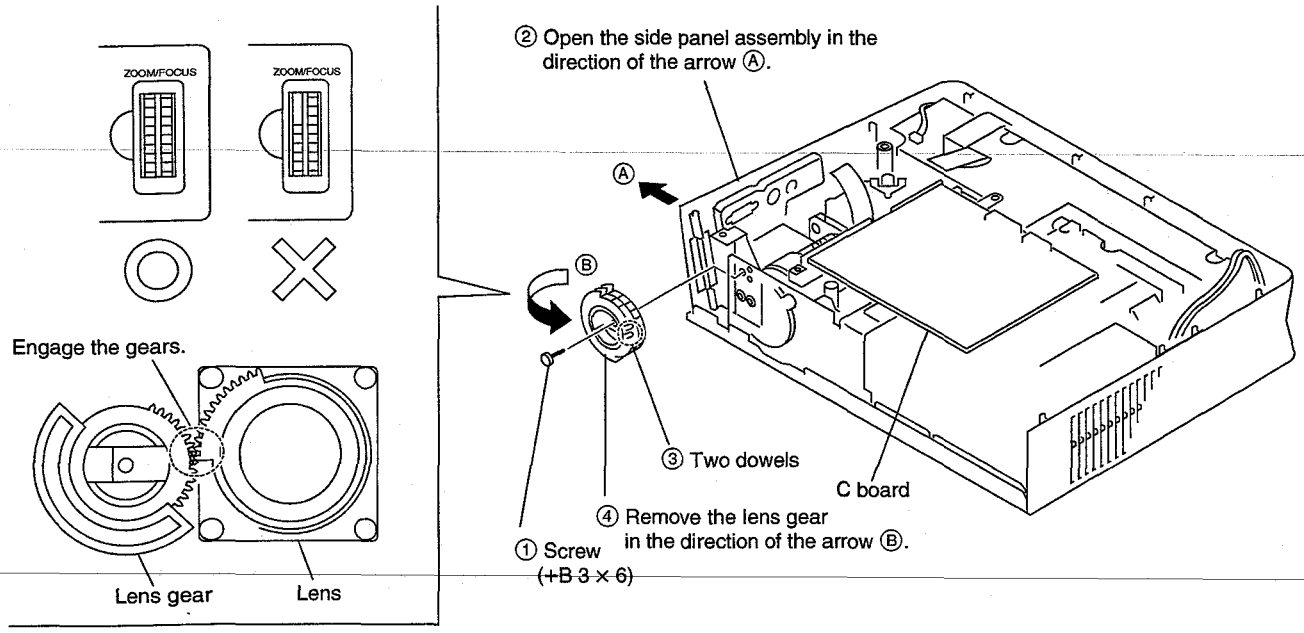


1-3-3. C Board

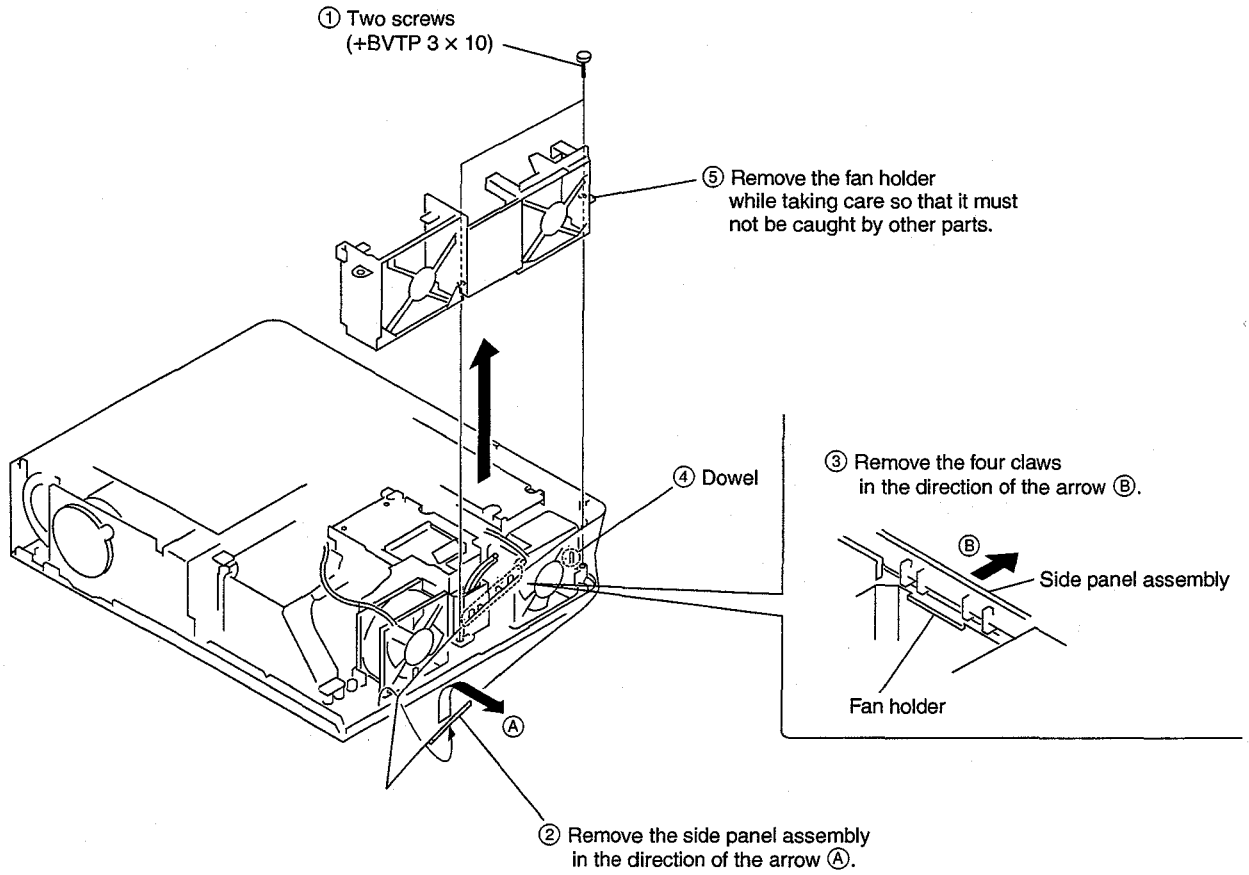

③ Four screws
(+B 3 × 6)
C board
① Remove the harneses
CN904
CN906
CN812
CN601
CN804
CN501
CN807
CN810
CN651
CN802
② Remove the fuse
connector assembly
⑤ Remove the C board
in the direction of the arrow Ⓑ.
Side panel shaft
Ⓑ
Ⓐ
④ Open the side panel assembly in the
direction of the arrow Ⓐ.
⑧ Two screws
⑨ Bracket (C)
⑦ Screw
(+B 3 × 6)
⑩ Fuse connector
assembly
CN806
⑪ C board
CN905
CN811
CN809
Side panel shaft
C board
Ⓒ
⑥ Remove the C board
in the direction of the arrow Ⓒ.

1-3-4. Lens Gear

• Remove the C board. (Refer to 1-3-3.)

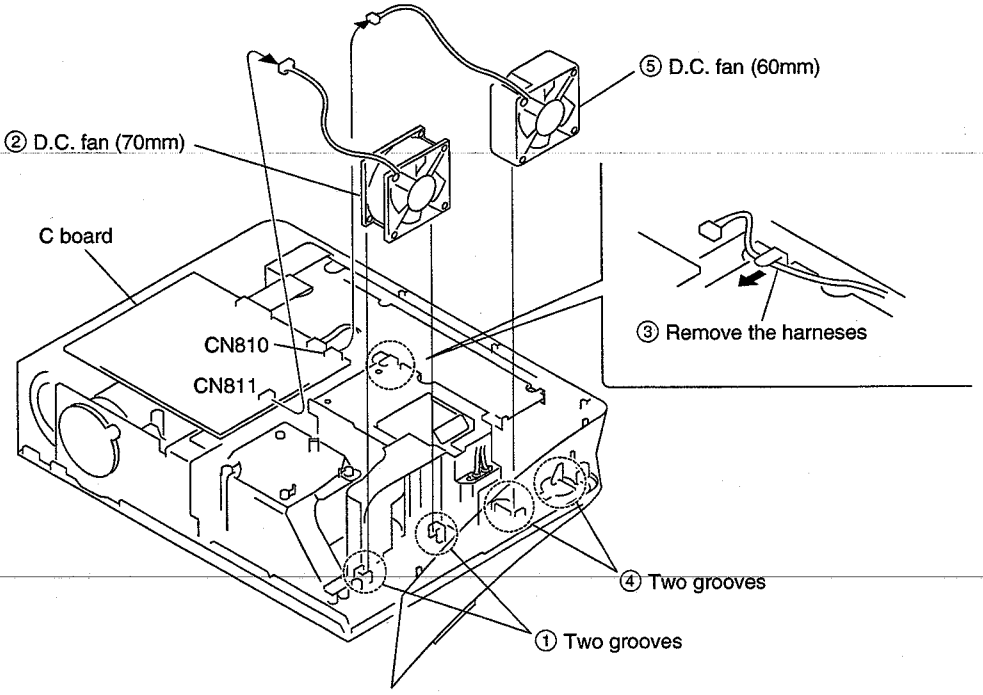


1-3-5. Fan Holder


① Two screws (+BVTP 3 × 10)
⑤ Remove the fan holder while taking care so that it must not be caught by other parts.
④ Dowel
③ Remove the four claws in the direction of the arrow Ⓑ.
Ⓑ
Side panel assembly
Fan holder
Ⓐ
② Remove the side panel assembly in the direction of the arrow Ⓐ.

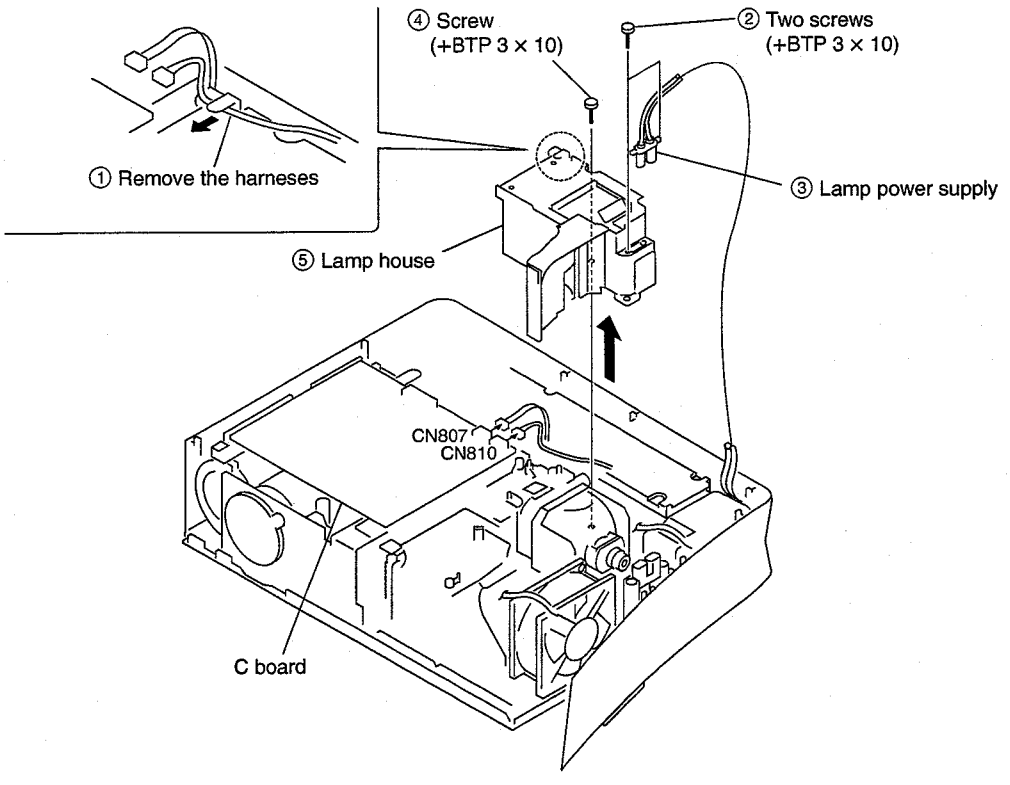
1-3-6. D.C. Fan (60mm) and D.C. Fan (70mm)

• Remove the fan holder. (Refer to 1-3-5.)



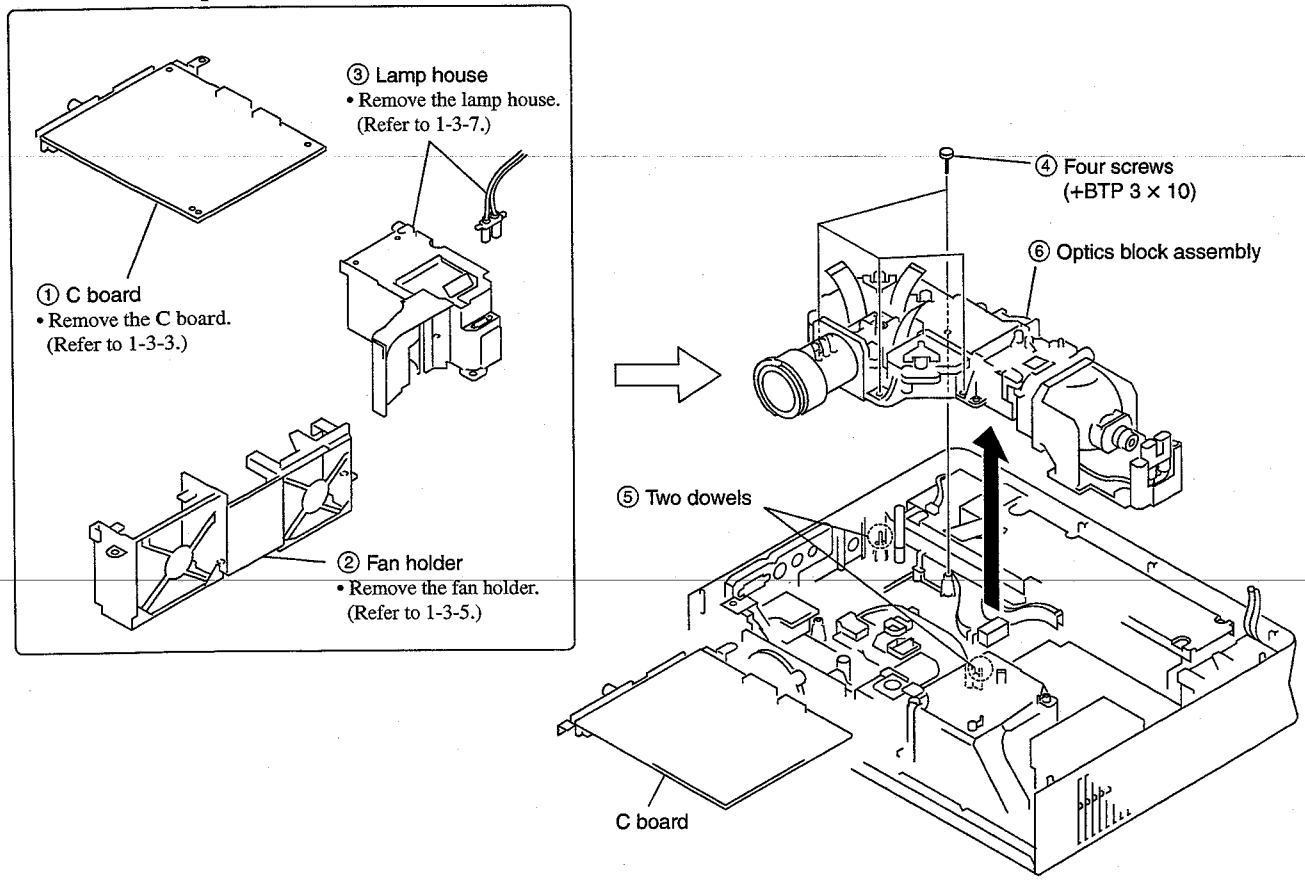
1-3-7. Lamp House

• Remove the fan holder. (Refer to 1-3-5.)



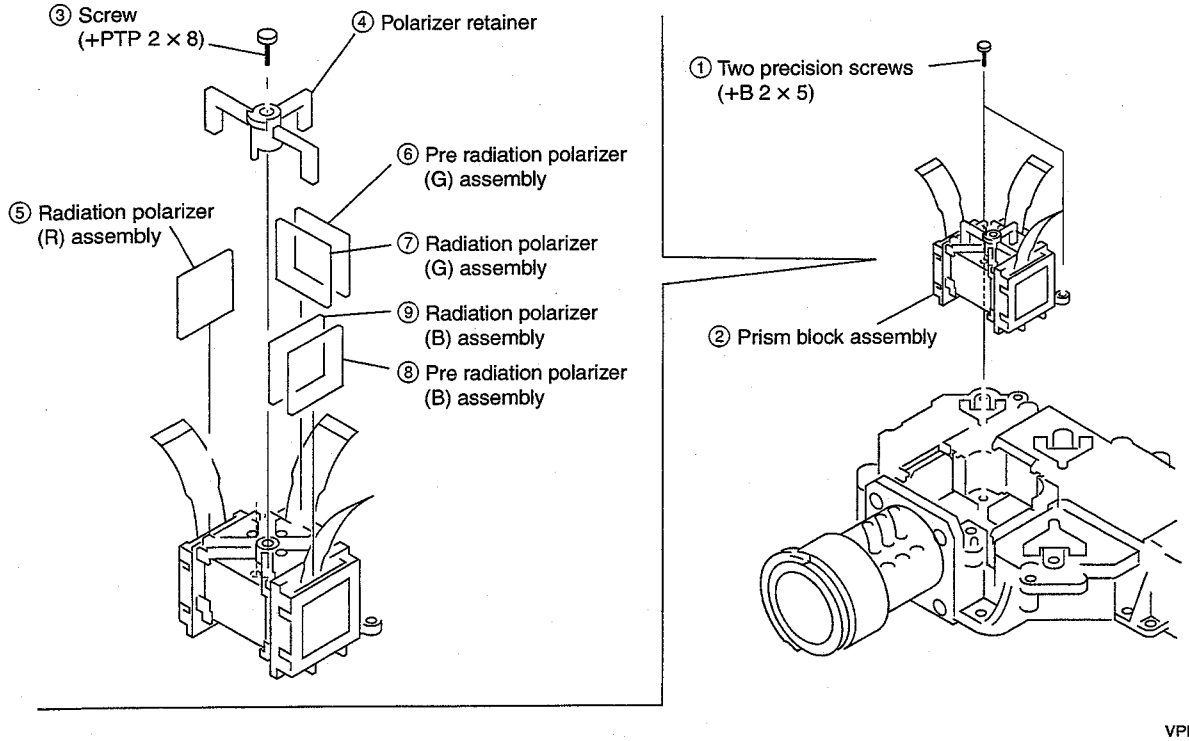
1-3-8. Optics Block Assembly

• To remove the optics block assembly, remove the related parts beforehand.



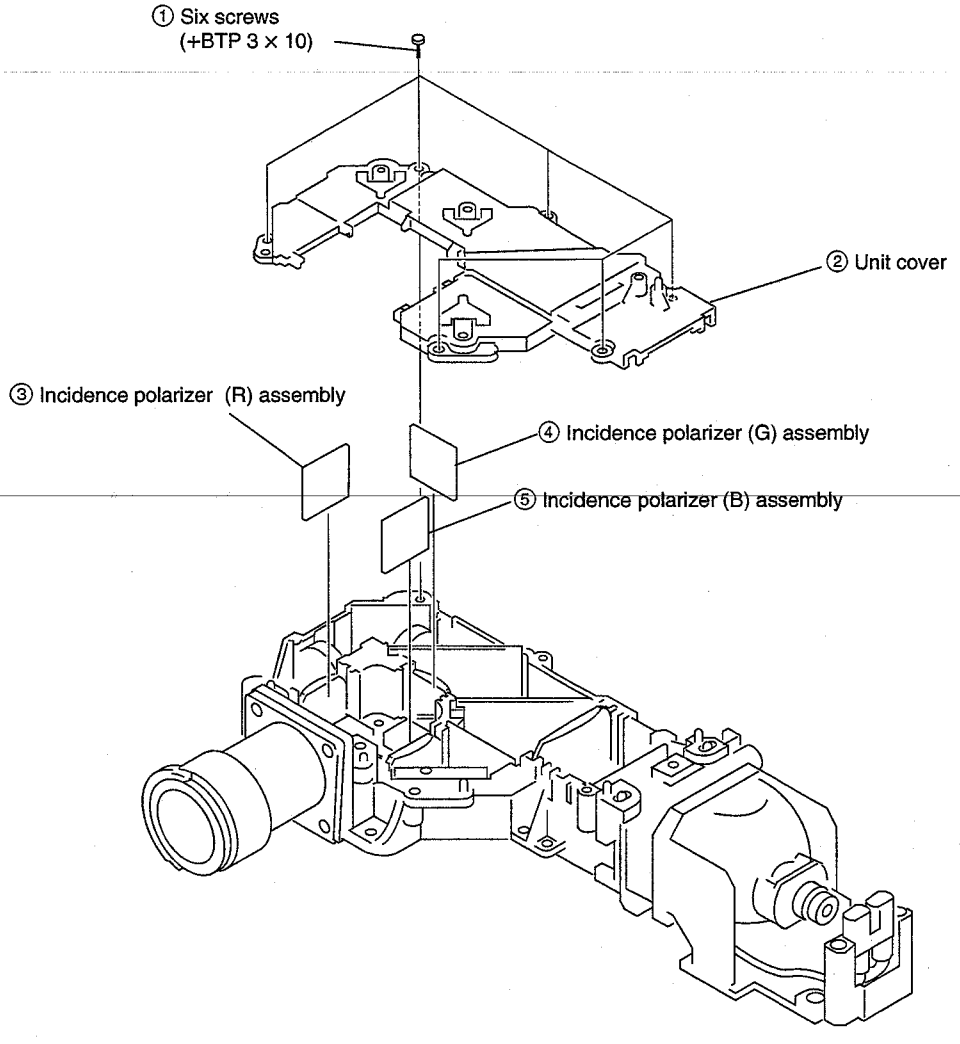
1-3-9. Prism Block Assembly

• Remove the optics block assembly. (Refer to 1-3-8.)

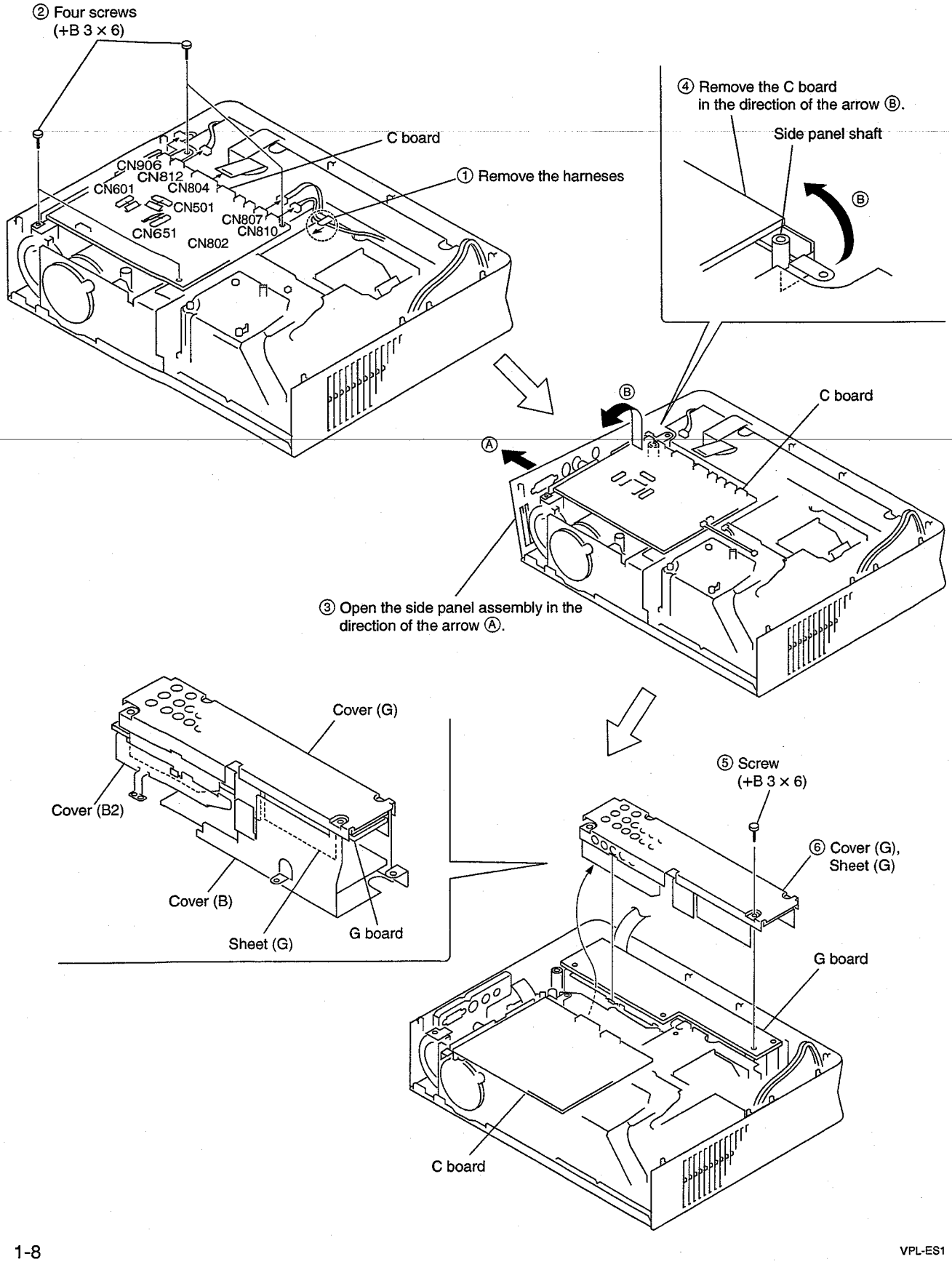


1-3-10. Incidence Polarizer (R), (G), (B)

- Remove the optics unit assembly. (Refer to 1-3-8.)
- Remove the prism block assembly. (Refer to 1-3-9.)

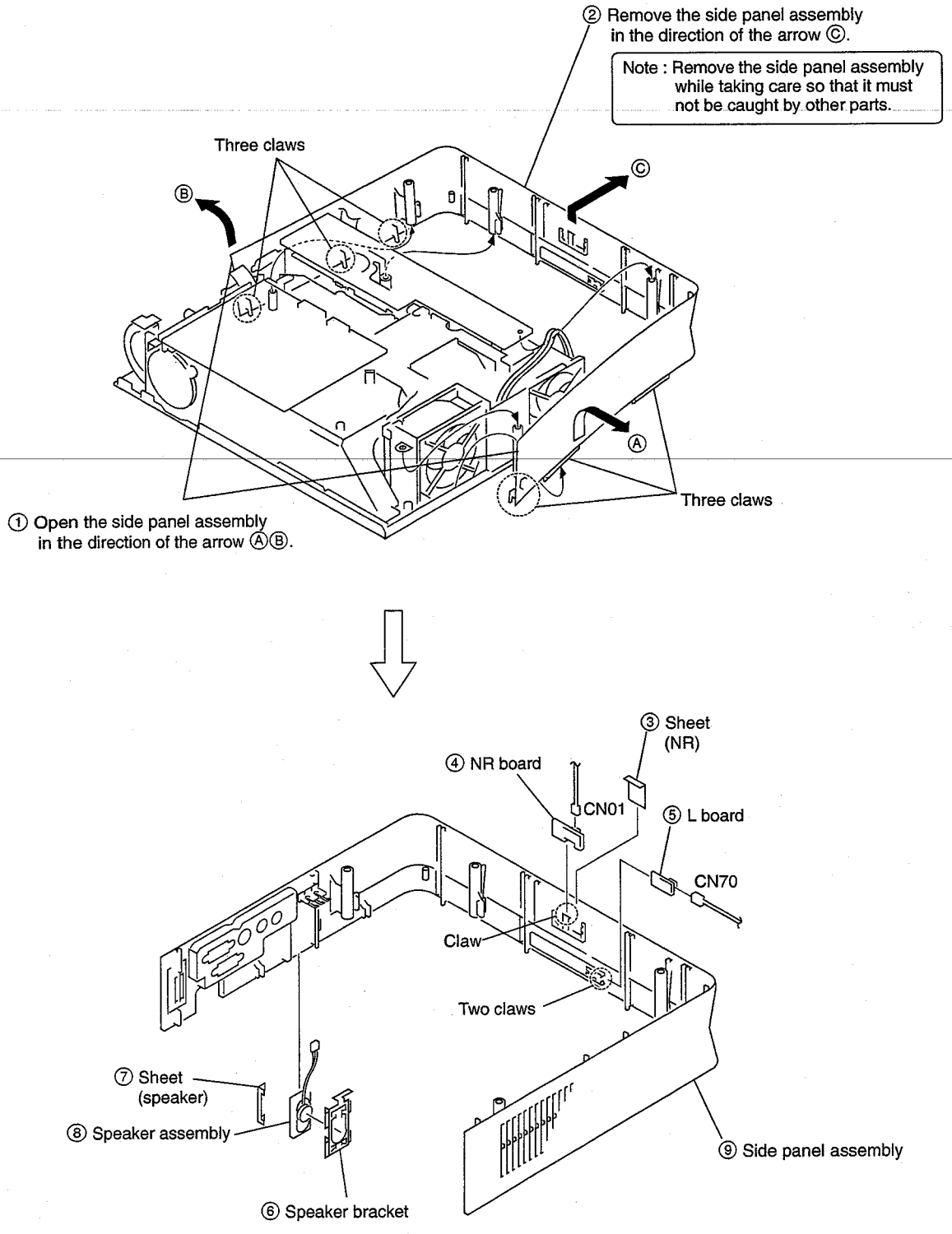

① Six screws
(+BTP 3 × 10)
② Unit cover
③ Incidence polarizer (R) assembly
④ Incidence polarizer (G) assembly
⑤ Incidence polarizer (B) assembly

1-3-11. Side Panel Assembly-1



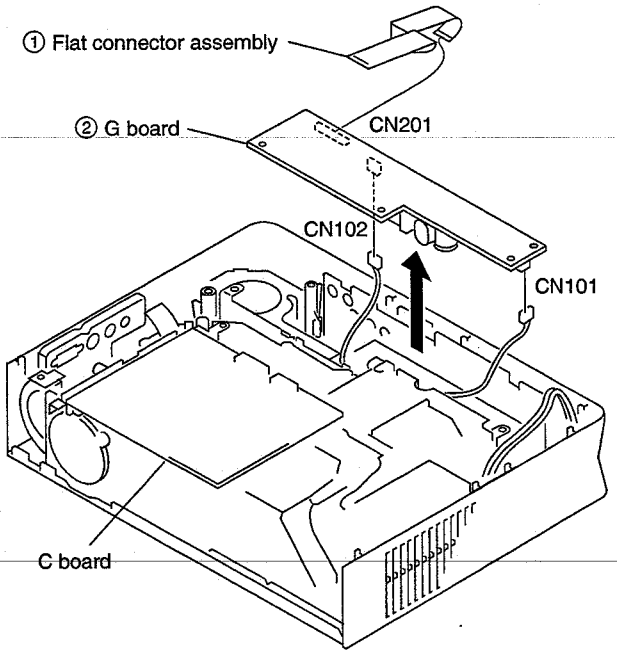
1-3-12. Side Panel Assembly-2

• Remove the C board and cover (G). (Refer to 1-3-11.)


② Remove the side panel assembly in the direction of the arrow Ⓒ.
Note : Remove the side panel assembly while taking care so that it must not be caught by other parts.
Three claws
Ⓑ
Ⓒ
Ⓐ
Three claws
① Open the side panel assembly in the direction of the arrow ⒶⒷ.
③ Sheet (NR)
④ NR board
CN01
⑤ L board
CN70
Claw
Two claws
⑦ Sheet (speaker)
⑧ Speaker assembly
⑥ Speaker bracket
⑨ Side panel assembly

1-3-13. G Board

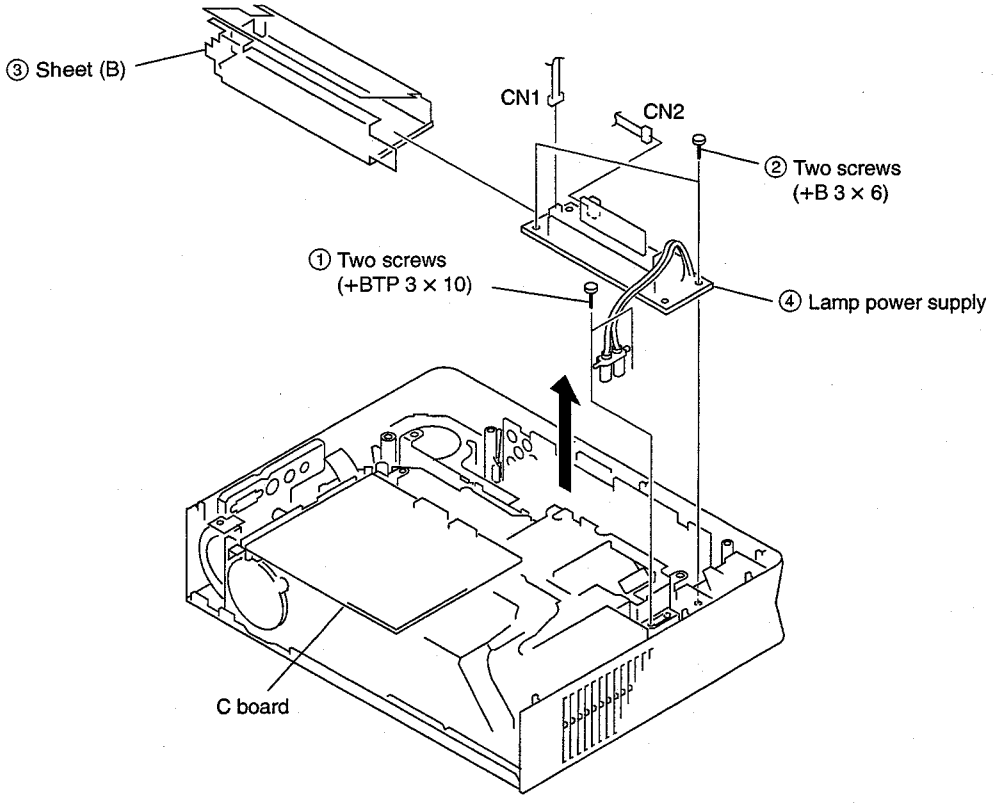
• Remove the cover (G), sheet (G). (Refer to 1-3-11)



1-3-14. Lamp Power Supply

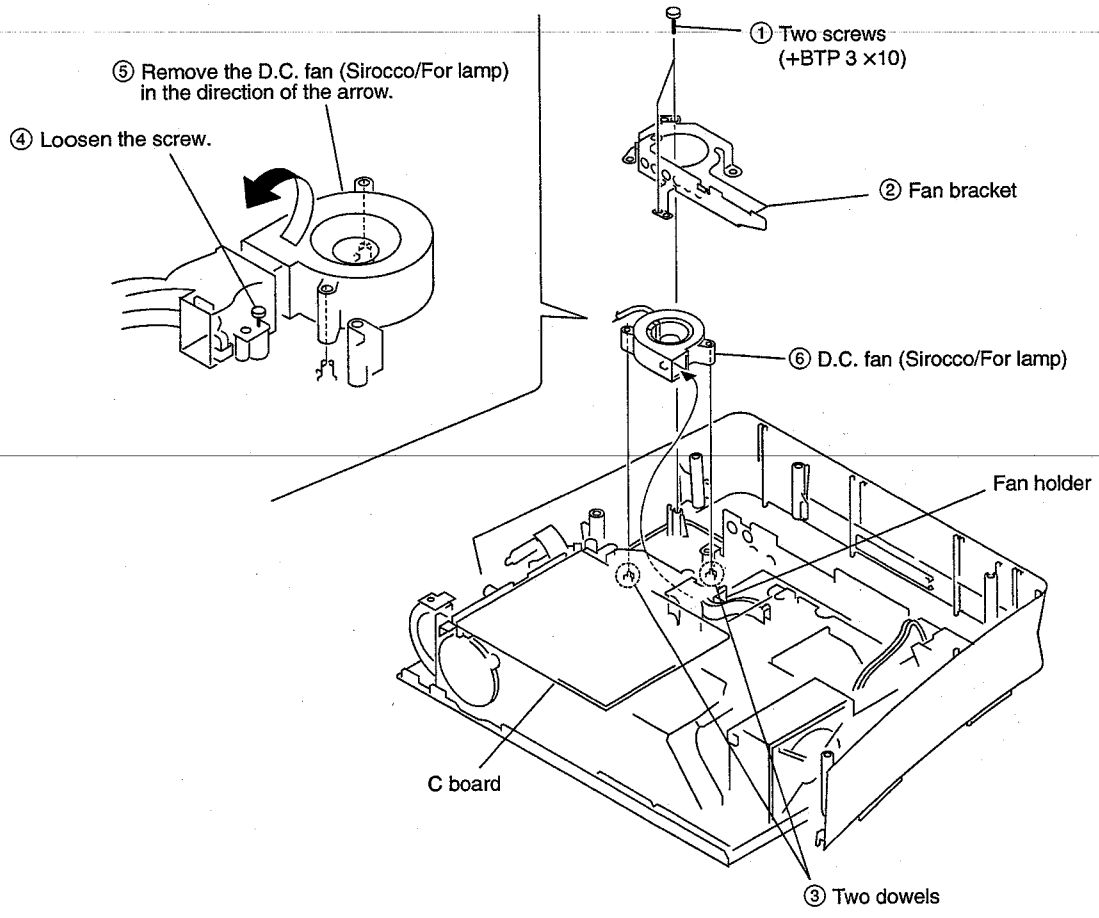
• Remove the cover (G), sheet (G). (Refer to 1-3-11)

• Remove the G board. (Refer to 1-3-13.)

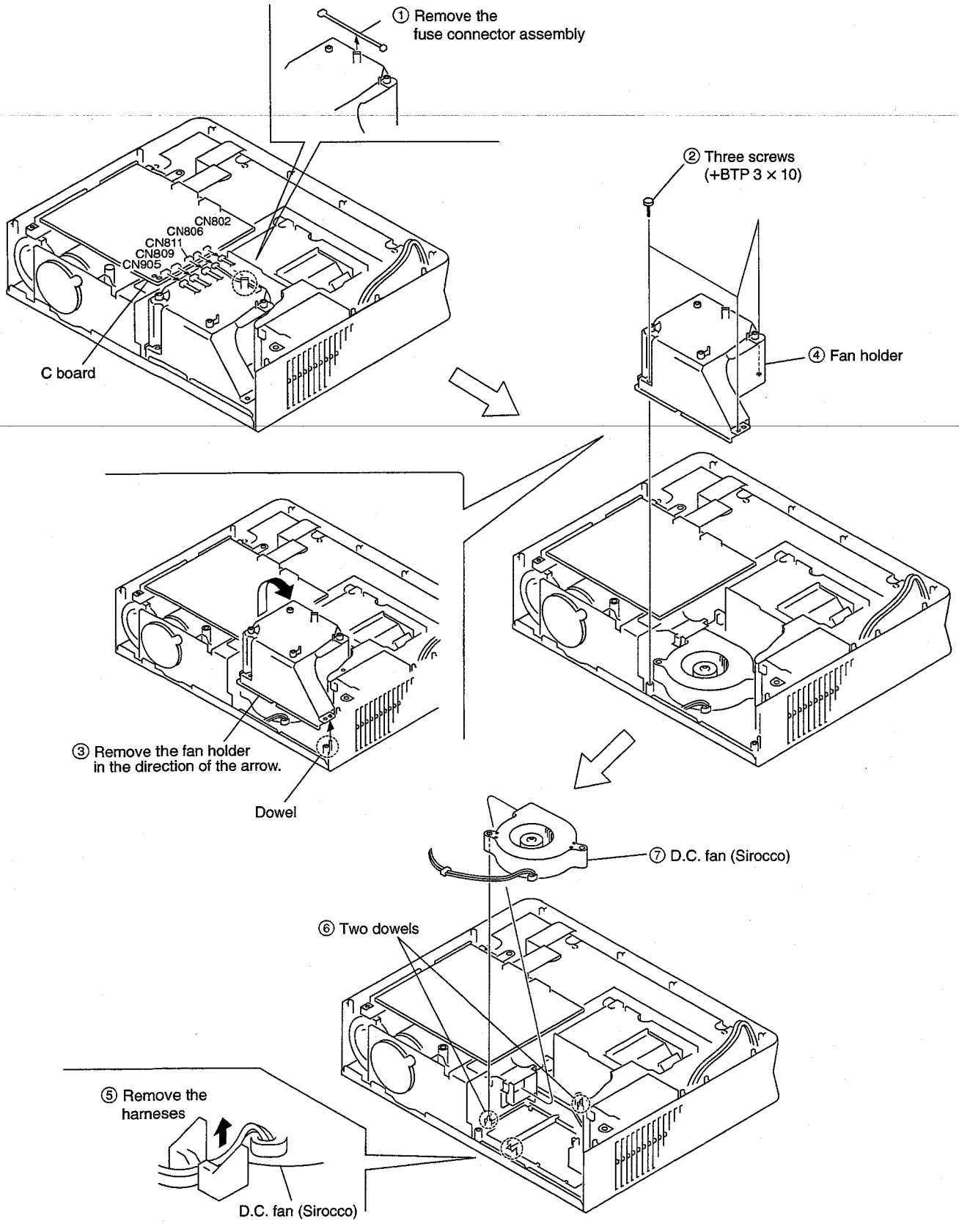


1-3-15. D.C. Fan (Sirocco/For Lamp)

- Remove the side panel assembly-1,2. (Refer to 1-3-11, 12)
- Remove the G board. (Refer to 1-3-13.)

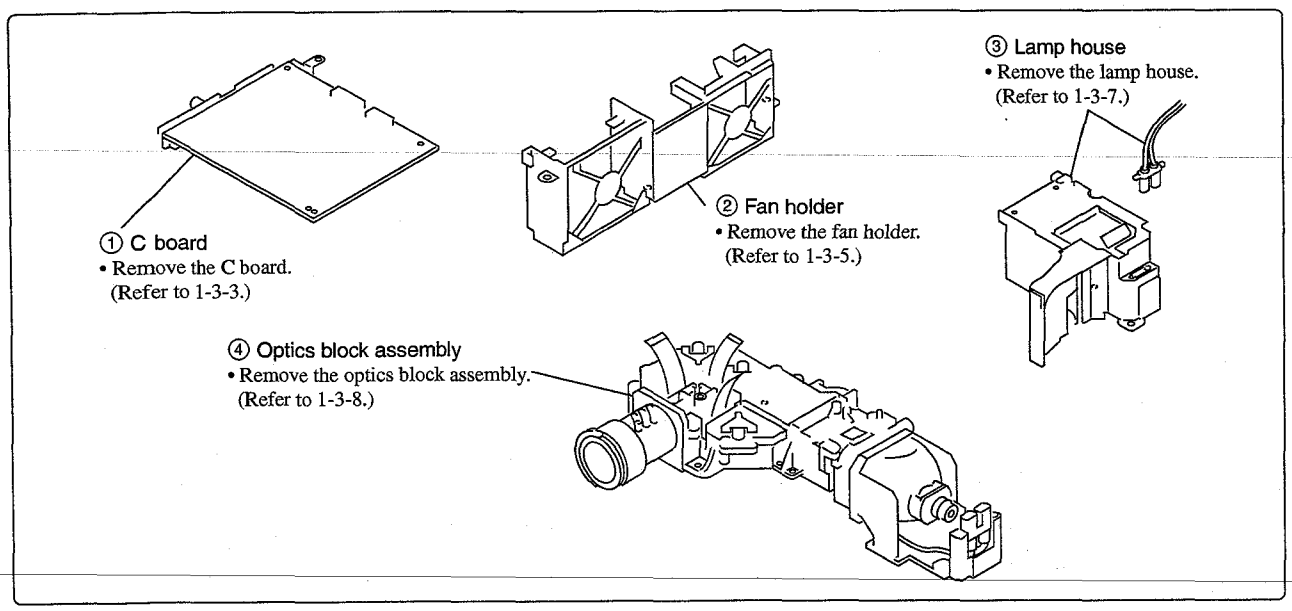


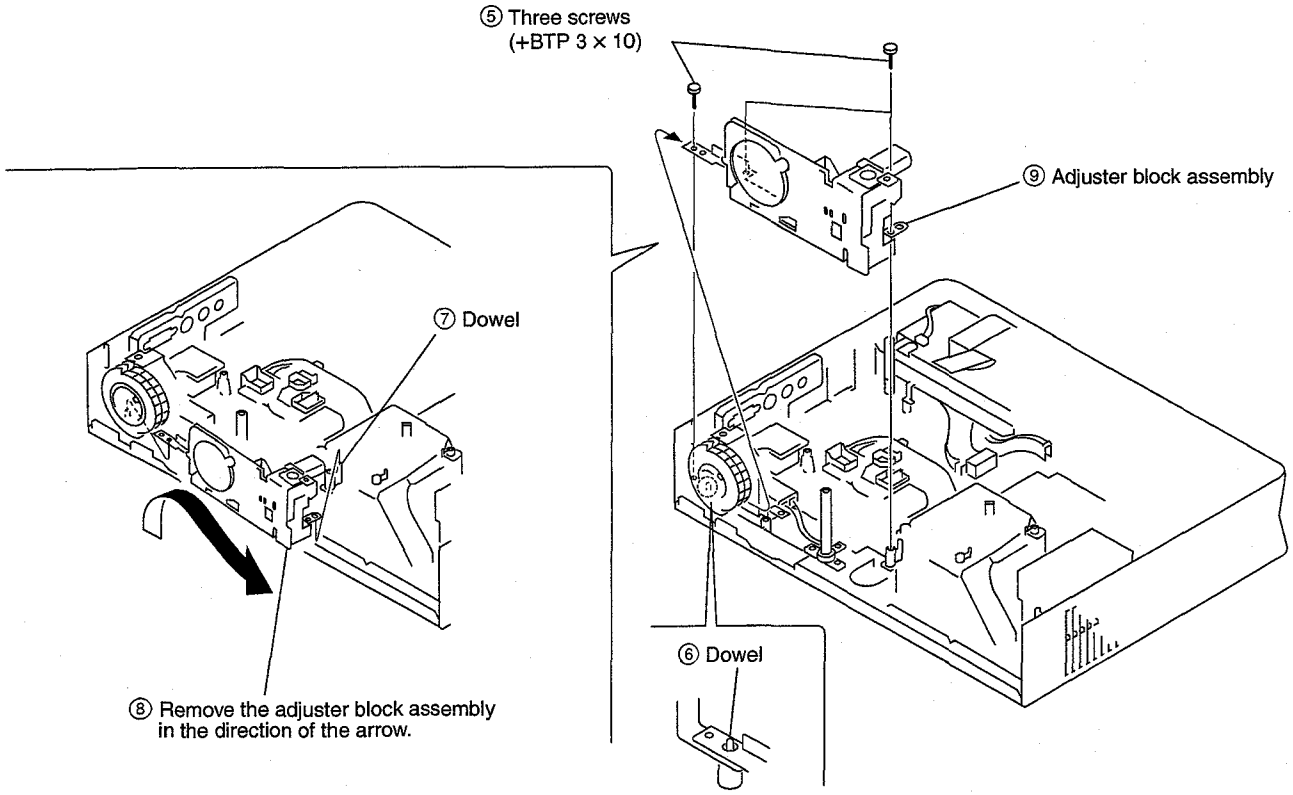
1-3-16. D.C. Fan (Sirocco)



1-3-17. Adjuster Block Assembly

• To remove the adjuster block assembly, remove the related parts beforehand.





1-4. Warning on Power Connection

Note

- When a signal other than the preset signals shown above is input, the picture may not appear properly.
- Memory No. 22 shows the interlace signal.

Warning on power connection

Use a proper power cord for your local power supply.

	The United States, Canada		Continental Europe		UK, Ireland, Australia, New Zealand	Japan
Plug type	VM0233	290B	YP-12A	COX-07	-(1)	YP332
Connector type	VM0089	386A	YC-13B	COX-02	VM0310B	YC-13
Cord type	SJT	SJT	H05VV-F	H05VV-F	N13237/CO-228	VCTF
Rated Voltage & Current	10A/125V	10A/125V	10A/250V	10A/250V	10A/250V	7A/125V
Safety approval	UL/CSA	UL/CSA	VDE	VDE	VDE	DENAN
Cord length (max.)	4.5m		–			

(1) Use an appropriate rating plug which is applied to local regulations.

Section 2
Electrical Adjustments

2-1. Preparation

2-1-1. Required Equipment

- NTSC, PAL, SECAM component signal generator Sony Tektronix TG2000 + AVG1 (option module) + AWVG1 (option module) or equivalent
- VG (programmable video signal generator) VG854 or equivalent
- Illuminance meter

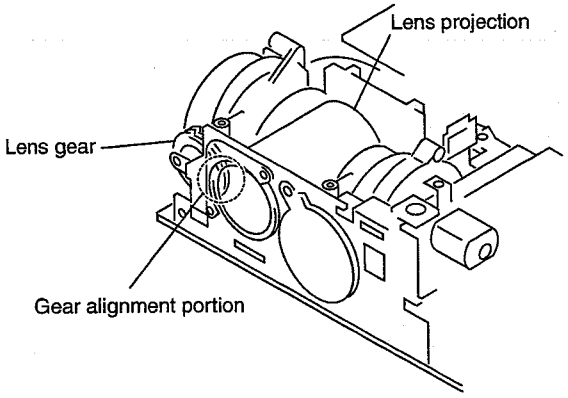
Note

Allow the warm-up time of 5 minutes after the power is on before starting the following adjustments.

2-1-2. Opt Unit Adjustment

1. Let the VPL-ES1 show the ALL WHITE screen.
2. Adjust the B-channel illumination adjustment mirror so that the yellow frame must not appear in any of top, bottom, right and left of the screen.
3. Tighten the adjustment plate fixing screw using a torque screwdriver. (Torque 0.19 ±0.03 Nm)
4. Adjust the G-channel illumination adjustment mirror so that the magenta frame must not appear in any of top, bottom, right and left of the screen.
5. Tighten the adjustment plate fixing screw using a torque screwdriver. (Torque 0.19 ±0.03 Nm)
6. Adjust the R-channel illumination adjustment mirror so that the cyan frame must not appear in any of top, bottom, right and left of the screen.
7. Tighten the adjustment plate fixing screw using a torque screwdriver. (Torque 0.19 ±0.03 Nm)
8. Confirm that the illumination range error is within the allowable range of product specification.
9. Install the VPL-ES1 in the cabinet. Confirm that the illumination range error is within the allowable range of product specification after the VPL-ES1 is installed in the cabinet.

When installing the optical unit in this model, alignment of the gear tooth position is required. Perform the following steps.



Procedure

1. Rotate the lens focus and zoom in the fully clockwise positions. Lock the lens gear in the direction shown in Fig. 1.

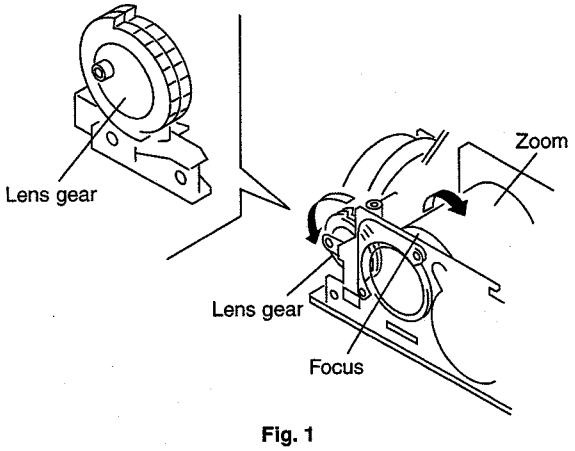


Fig. 1

2. Align the marking position of the lens zoom gear with the protrusion of the lens gear approximately by visual observation as shown below.

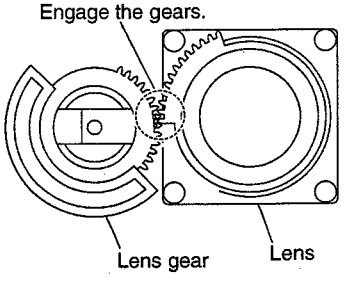
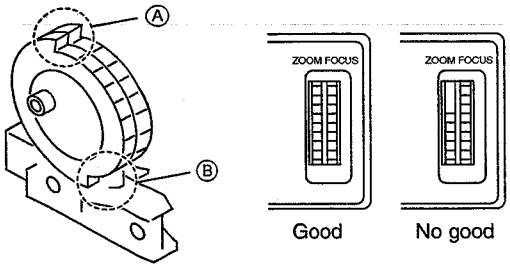


Fig. 2 (inside view)

Confirmation

Install the side panel and confirm that the portions Ⓐ and Ⓑ of the dial cannot be seen from the opening of the side panel when the ZOOM and FOCUS are moved to their very ends.



2-1-3. How to Enter the Factory Mode

1. Confirm that the MENU can be displayed.
2. Close the MENU.
3. Press the keys in the following order : [ENTER] → [ENTER] → [←] → [ENTER].
   The message [Do you want to enter the Factory Mode? Yes : ↑ No : ↓] appears.
   Select [Yes : ↑].

[Supplementary information: How to Exit the Factory Mode]

Perform the step 3 KEY operation.
The message [Do you want to return to the User Mode? Yes : ↑ No : ↓] appears.
Select [Yes : ↑].

Note

In the Factor mode, you can close the lens shutter if you keep pressing the TILT key even though the lamp lights. If the machine is left in this state for long hours, the lens shutter may melt in the worst case. Be sure to confirm that the lens shutter is not closed when the lamp lights in the Factory mode.

2-2. V COM Adjustment

1. Connect the VG to the INPUT-A connector. Connect the FLAT FIELD 100 IRE signal to the input connector. Leave the VPL-ES1 with POWER ON for 10 minutes or longer for aging.
2. Enter the Factory Mode. Enter the Device Adjust MENU, and then enter the Panel Drive Adjustment MENU.
3. Connect the SVGA, R-single color, 30 IRE, single-line ON/OFF signal to the input connector.
4. Enter the P. DRV Adjustment MENU, and then enter the VCOM R Adjustment screen.
5. Adjust the VCOM R value for minimum flicker.
6. Change the input signal to the SVGA, G-single color, 30 IRE, single-line ON/OFF signal, and connect it to the input connector.
7. Enter the P. DRV Adjustment MENU, and then enter the VCOM G Adjustment screen.
8. Adjust the VCOM G value for minimum flicker.
9. Change the input signal to the SVGA, B-single color, 30 IRE, single-line ON/OFF signal, and connect it to the input connector.
10. Enter the P. DRV Adjustment MENU, and then enter the VCOM B Adjustment screen.
11. Adjust the VCOM B value for minimum flicker.
12. Store the adjustment value in the memory.
13. Turn over the "Image flip" up side down and repeat the steps from 1 through 12.

2-3. Initial Values of Adjustment Items

MenuTitle	ItemName	MemoryName												Remark
		Set Memory	Status Memory	Picture Memory						W/B Memory				
				Video		S Video		Input-A		Video		Computer		
				Dynamic	Standard	Dynamic	Standard	Dynamic	Standard	High	Low	High	Low	
PICTURE SETTING	Picture Mode		Standard											
	Adjust Picture...													
	Contrast			90	80	90	80	90	80					
	Brightness			40	50	40	50	40	50					
	Color			50	50	50	50	50	50					
	Hue			50	50	50	50	50	50					
	Sharpness			High	High	Middle	Middle	Middle	Middle					
	Gamma Mode			-	-	-	-	Graphics	Graphics					
	Color Temp.			Low	Low	Low	Low	High	High					
	Volume	30												
INPUT SETTING	Adjust Signal...													
	Dot Phase		15 (*)											
	H Size		*											
	Shift		*											
	Wide Mode			Off	Off	Off	Off	Off	Off					
	Scan Conv							On	On					
SET SETTING	Smart APA	On												
	Auto Input Search	Off												
	Input-A Signal Sel.	Computer												
	Color System	Auto												
	Power Saving	Off												
	Illumination	On												
MENU SETTING	Status	On												
	Languege	English												
	Menu Position	Center												
	Menu Color	White												

MenuTitle	ItemName	MemoryName												Remark
		Set Memory	Status	Picture Memory						W/B Memory				
				Video		S Video		Input-A		Video		Computer		
				Dynamic	Standard	Dynamic	Standard	Dynamic	Standard	High	Low	High	Low	
INSTALL SETTING	Tilt...													
	V Keystone	Auto												
	Manual...	0												
	Image Flip	Off												
	Background	Blue												
	Lamp Mode	Standard												
	High Altitude	Off												
	Security Lock	Off												
	Key	Enter x 4												
INFORMATION	fH	Display only												
	fV	Display only												
	(Memory No.)	Display only												
	(Resolution)	Display only												
	Lamp Timer	Display only												
	ROM Version	Display only												
	SC ROM Version	Display only												
	Operation Timer	Display only												
	Prev. Lamp Timer	Display only												
W/B SETTING	Gain R									155	165	150	150	
	G									145	120	140	140	
	B									130	130	150	140	
	Bias R									130	130	127	127	
	G									120	120	127	127	
	B									120	120	127	127	

* : The "Dot Phase E, H Size, Shift H/V and Picture Mode" items in the "INPUT SETTING" menu have their respective initial values for each input signal (PRESET MEMORY No.).

Note

There are some adjustment items that cannot be adjusted, depending on the input signal.

Device Name	Item Name		MemoryName														Remark
			Set Memory	Status Memory	Chroma Memory							Channel Memory			Image Flip Memory		
					NT358/ NT443 /BW60	Pal/Pal-M/ N/Secam/ BW50	15k RGB	Component (15k)	Double-speed component	HDTV (YPbPr)	HDTV (GBR) includ. double-speed	Video	S Video	Input-A	Up/Down inversion possible	Up/Down inversion not possible	
A/D Converte	ADC/	Clamp Position		*1													
		Clamp Width		*1													
		R Gain(Other)										15	-	120			
		R Gain(Component)										-	-	80			
		R Gain(VideoGBR)										-	-	75			
		G Gain(Other)										-	100	120			
		G Gain(Component)										-	-	120			
		G Gain(VideoGBR)										-	-	75			
		B Gain(Other)										-	100	120			
		B Gain(Component)										-	-	80			
		B Gain(VideoGBR)										-	-	75			
		R Offset(Other)										126	-	128			
		R Offset(Component)										-	-	128			
		R Offset(VideoGBR)										-	-	128			
		G Offset(Other)										-	128	128			
		G Offset(Component)										-	-	128			
		G Offset(VideoGBR)										-	-	128			
		B Offset(Other)										-	128	128			
		B Offset(Component)										-	-	128			
		B Offset(VideoGBR)										-	-	128			
		Bandwidth		3													
Chroma/ D.Comb	Chroma/	Dither										2	2	2			
		Vd 10BitEn										1	1	1			
		Secam Nbw										1	1	1			
		Line2 A Sync										15	15	15			
		Line2 H Sync										7	7	7			
		Line2 Los										31	31	31			
		Status 1	Display only														
		Status 2	Display only														

Device Name	Item Name		MemoryName														Remark
			Set Memory	Status Memory	Chroma Memory							Channel Memory			Image Flip Memory		
					NT358/ NT443 /BW60	Pal/Pal-M/ N/Secam/ BW50	15k RGB	Component (15k)	Double-speed component	HDTV (YPbPr)	HDTV (GBR) includ. double-speed	Video	S Video	Input-A	Up/Down inversion possible	Up/Down inversion not possible	
Panel Driver	P.Drv	Offset R													122	122	
		Offset G													122	122	
		Offset B													122	122	
		V Common R													92	92	
		V Common G													92	92	
		V Common B													92	92	
		Psig 1 R	17														
		Psig 1 G	17														
		Psig 1 B	17														
		Psig 2 R	83														
		Psig 2 G	83														
		Psig 2 B	83														
		Signal Center R	32														
		Signal Center G	32														
		Signal Center B	32														
		Gain R	154														
		Gain G	154														
		Gain B	154														
		Installation	Non Adjustable														
Other	3D Gamma	Through	0														
		SW	1														
	DRC/	FSEL	1														
		CYD	2														
	Other/	HST Position	903														
		HST Phase	69														
		HST Width	0														

Device Name	Item Name		MemoryName														Remark
			Set Memory	Status Memory	Chroma Memory							Channel Memory			Image Flip Memory		
					NT358/ NT443 /BW60	Pal/Pal-M/ N/Secam/ BW50	15k RGB	Component (15k)	Double-speed component	HDTV (YPbPr)	HDTV (GBR) includ. double-speed	Video	S Video	Input-A	Up/Down inversion possible	Up/Down inversion not possible	
Other	Temp/	Thresh Lamp													Non Adjustable	Non Adjustable	
		Thresh Panel													Non Adjustable	Non Adjustable	
		Thresh Atmos													Non Adjustable	Non Adjustable	
	Fan/	Hi Alt Const													Non Adjustable	Non Adjustable	
		High Alt Cofe													Non Adjustable	Non Adjustable	
	Fan1/	Cont Max													Non Adjustable	Non Adjustable	
		Speed Max													Non Adjustable	Non Adjustable	
		Speed Min													Non Adjustable	Non Adjustable	
		Cont Slope													Non Adjustable	Non Adjustable	
	Fan2/	Cont Max													Non Adjustable	Non Adjustable	
		Speed Max													Non Adjustable	Non Adjustable	
		Speed Min													Non Adjustable	Non Adjustable	
		Cont Slope													Non Adjustable	Non Adjustable	
	Fan3/	Cont Max													Non Adjustable	Non Adjustable	
		Speed Max													Non Adjustable	Non Adjustable	
		Speed Min													Non Adjustable	Non Adjustable	
		Cont Slope													Non Adjustable	Non Adjustable	
	Other/	Synchronous	1														
		Tilt C0	Factory adj. Value														
		Tilt C1	Factory adj. Value														
		Tilt C2	Factory adj. Value														
		X Tilt	Display only														
		Y Tilt	Display only														
		TL	Display only														
		TP	Display only														
		TA	Display only														
Gamma			Factory adj. Value														

Note

There are some adjustment items that cannot be adjusted, depending on the input signal.

* 1 : The value changes depending on the color systems and input terminals.

2-4. Service Know-How

2-4-1. When the S Prism Block Is Replaced

1. Perform the V COM adjustment. (Refer to Section "2-2. VCOM Adjustment".)
2. Write the GAMMA data of the S prism block.
3. Perform the white balance adjustment. (Refer to Section "2-5. White Balance Adjustment".)

2-4-2. When the C Board Is Replaced

Note

If any board other than the C board is replaced, there is not adjustment item.

When the C board is replaced

1. Install the IC406 that was removed from the old C board, into the new C board.
2. Enter the Factory Mode.
3. Press the TILT key on the flat workbench. Stop pressing the TILT key at the position where the lens shutter becomes invisible when viewed from the front of the VPL-ES1.
4. Press the TILT ▲ key until the "[value that is displayed in step 3] + [+10] value is obtained.
5. Press the following keys in order.
   ENTER → ENTER → POSTION + → MEMORY keys (Memorizing the adjustment value)
6. Press the TILT ▲ key until the Adjusters does not touch the floor and at the same time the lens shutter is fully opened.
7. Press the MENU key to display the menu. Press the ↓ key and enter the Device Adjust Menu.
8. Enter the Other MENU and let the message "38 Other/X TILT xxxx" (xxxx is any value) on screen.
9. Enter the X TILT value while the VPL-ES1 is set in the horizontal position, in "35 Other/TILT CO".
10. Turn the VPL-ES1 so that it faces upward in the vertical position. Enter the X TILT value in the vertical position, in "36 Other/TILT C1".
11. Turn the VPL-ES1 so that it faces downward in the vertical position. Enter the X TILT value in the vertical position, in "37 Other/TILT C2".
12. Press the MEMORY key and save the adjustment value.

2-5. White Balance Adjustment

Preparation before adjustment

1. Input the 100 IRE flat field signal to the INPUT-A connector and allow the warm-up of 10 minutes aging at a minimum.
2. Enter the Service Mode.
   Press the keys in the following order.
   [ENTER] → [ENTER] → [↑] → [↓] → [ENTER].
   The message [Do you want to enter the Service Mode? Yes : ↑ No : ↓] appears.
   Select [Yes : ↑].

[Supplementary information: How to Exit the Service Mode]

Perform the step 2 KEY operation.
The message [Do you want to return to the User Mode?] appears.
Select [Yes : ↑].

2-5-1. HIGH Mode of INPUT-A

Connect the10-step signal to the INPUT-A connector and measure the chromaticities at each brightness.
If chromaticities are different at each brightness, perform the following adjustment.

1. Input the 100 IRE flat field signal to the INPUT-A connector.
2. Measure the chromaticity (x, y).
3. Input the 80 IRE flat field signal.
4. Adjust the GAIN R and GAIN B in the HIGH mode of W/B until the chromaticity (x, y) that is measured at step 2 is obtained.
5. Input the 30 IRE flat field signal.
6. Adjust the BIAS R and BIAS B in the HIGH mode of W/B until the chromaticity (x, y) that is measured at step 2 is obtained.
7. Repeat steps 3 to 6 until the chromaticity (x ±0.002, y ±0.004) with reference to the chromaticity (x, y) that is measured at step 2 is obtained.
8. Press the MEMORY key and save the adjustment value.

2-5-2. LOW Mode of INPUT-A

1. Input the 80 IRE flat field signal to the INPUT-A connector.
2. In the LOW mode of W/B, adjust the GAIN R for +15 higher than the value in the HIGH mode, adjust the GAIN G for −25 lower than the value in the HIGH mode and adjust GAIN B that is the same as the value in the HIGH mode.
3. Measure the chromaticity (x, y).
4. Input the 30 IRE flat field signal.
5. Adjust the BIAS R and BIAS B in the LOW mode of W/B until the chromaticity (x, y) that is measured at step 3 is obtained.
6. Input the 80 IRE flat field signal.
7. Adjust the GAIN R and GAIN B in the LOW mode of W/B until the chromaticity (x, y) that is measured at step 3 is obtained.
8. Repeat steps 4 to 7 until the chromaticity (x ±0.002, y ±0.004) with reference to the chromaticity (x, y) that is measured at step 3 is obtained.
9. Press the MEMORY key and save the adjustment value.

2-5-3. HIGH Mode of VIDEO

1. Input the NTSC or PAL video signal to the input connector.
2. In the HIGH mode of W/B, adjust the GAIN R for −20 lower than the value in the INPUT-A HIGH mode, adjust the GAIN G for −35 lower than the value in the INPUT-A HIGH mode and adjust GAIN B that is the −20 lower than the value in the INPUT-A HIGH mode.
3. Adjust BIAS G for −5 lower than the value in the INPUT-A HIGH mode, adjust the BIAS R and BIAS B for the same value as those of the INPUT-A HIGH mode.
4. Press the MEMORY key and save the adjustment value.

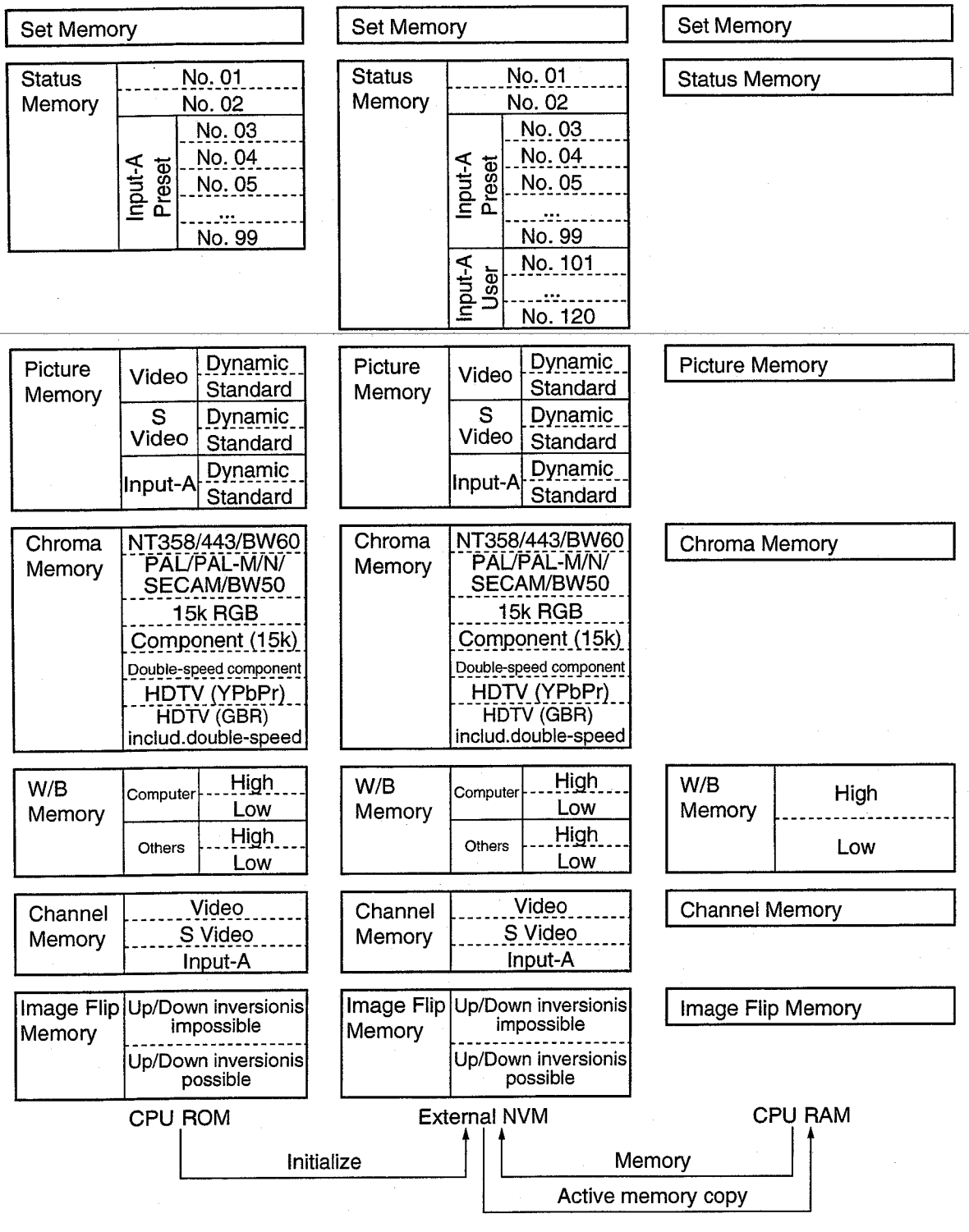
2-5-4. LOW Mode of VIDEO

1. Input the NTSC or PAL video signal to the input connector.
2. In the LOW mode of W/B, adjust the GAIN R for −20 lower than the value in the INPUT-A LOW mode, adjust the GAIN G for −35 lower than the value in the INPUT-A LOW mode and adjust GAIN B that is the −20 lower than the value in the INPUT-A LOW mode.
3. Adjust BIAS G for −5 lower than the value in the INPUT-A LOW mode, adjust the BIAS R and BIAS B for the same value as those of the INPUT-A HIGH mode.
4. Press the MEMORY key and save the adjustment value.

2-6. Memory Structure

Memory Structure

CPU internal ROM : 384 K byte Flash Memory
CPU internal RAM : 30 K byte
External NVM memory : 8 K byte EEPROM



Memory structure consists of the followings.

1 Set memory
2 Status memory
3 Picture memory
4 Chroma memory
5 W/B memory
6 Channel memory
7 Image Flip memory

* The gamma memory is realized by giving offset to Contrast and Brightness output values to the devices in the gamma mode function.

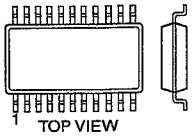
Flow of data is described briefly. When the power plug is connected to the wall outlet for the first time (Standby state), all data that are stored in the internal ROM are written in the NVM(non-volatile memory). When the POWER is turned ON, all the status memory data and other memory data that are required for the present picture are selected from each memory block and expanded in the internal RAM.

When any adjustment is performed at this moment, the adjustment data(user mode items) are written in the NVM(Service/Special Service item) automatically triggered by the memory operation.

The adjustment items(W/B, Device Adjust) that can be adjusted in the Service Mode or in the Special Service Mode, are memorized in the NVM at the time when the user performs adjustment and performs the memory operation. Note that the factory adjustment data will be lost at this moment.

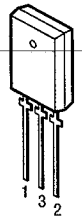
Section 3
Semiconductors

24LC21AT/SN
CY25023SZC-1T
HN58X24256FPIZ
M24C64-WMN6T(B)
SI4403DY-T1
SN75453BPS
SN75453BPSR
ST24FC21M6TR
TC7WH125FK(TE85R)
TC7WH34FU(TE12R)
UPC393G2
UPC393G2-E2

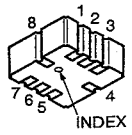


8pin SOP

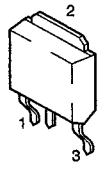
2SK219F04



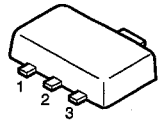
ADXL202JE-REEL



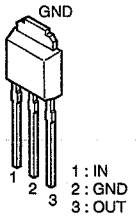
AIC1084-PEJTR



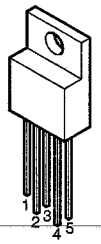
AIC1117A-18PYJTR
AIC1117A-33PYJTR
AIC1117A-50PYJTR



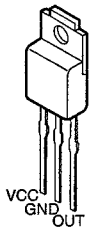
BA00ASFP-E2



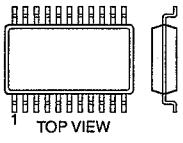
BA00AST
BA00AST-V5



BA09FP-E2

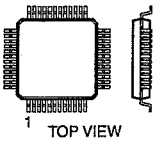


BA6288FS-E2
MC74HC4052ADTR2
TC74HC4052AFT(EL)
TPA2001D1PWR



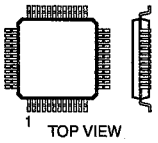
16pin SOP

CXA2171AQ
CXA2171AQ-T6
CXA7005R-T4



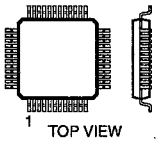
48pin QFP

CXD3536R



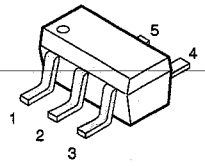
176pin QFP

HD64F2376VFQ33V

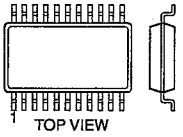


144pin QFP

LMC7101BIM5X
TK11125CSCL-G

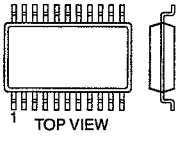


LTC1772CS6



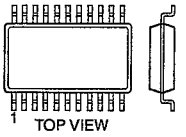
6pin SOP

M52347FP-TE
SN74AHCT541PWR
SN74LV244APWR
TC74VHCT540AFT(EL)
TDA7309D013TR



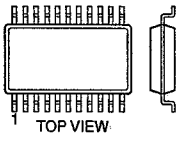
20pin SOP

MAX4382EUD+TG069
SN74LV00APWR
SN74LV02APWR
TC74LCX125FT(EL)



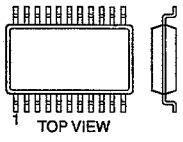
14pin SOP

MCZ3001U



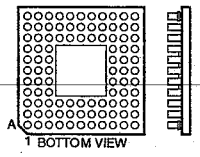
32pin SOP

MX29LV800ATTC-70G-751PW100



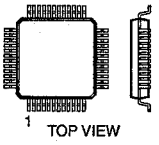
48pin SOP

PW168A-05VL



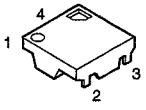
352pin PGA

PW2200-05L
PW2200A-05L

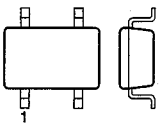


208pin QFP

RS-140-T

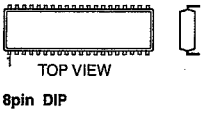


TK11900MTL



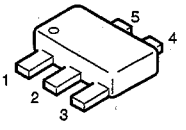
6pin CHIP

TL431CPK-E2



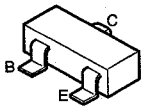
8pin DIP

S-80928CNMC-G8YT2G

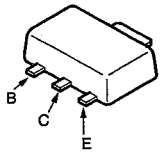


Transistor, Diode, LED

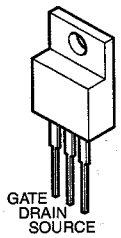
2SA1162-G
2SA1162-YG-TE85L
2SA1576A-T106-QR
2SC2712-YG
2SC2712-YG-TE85L
2SC4081-R
2SC4081T106R
DTA114EUA-T106
DTC144EUA-T106



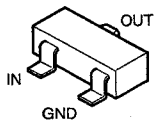
2SA1213Y-TE12L



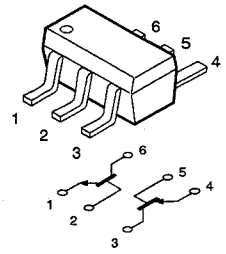
2SK2876-01MR-F122



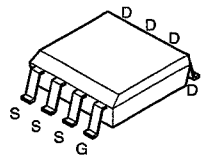
DTC114EU
DTC114EUA-T106



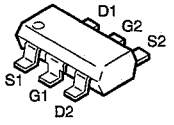
HN1B01FU-TE85R
HN1C01FU-TE85R



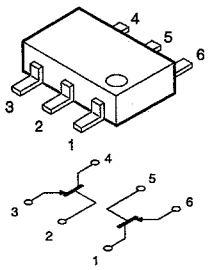
SI4425DY-T1



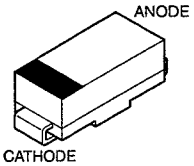
SSM6N15FU(TE85R)



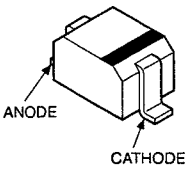
XP4501-TXE



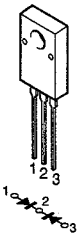
1SR154-400TE-25
D1FS4
D1FS4-TB
D1FS4A-TA



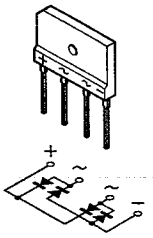
1SS355TE-17
EC31QS03L-TE12L
MA111-(K8).S0
MA111-TX
RD30SB-T1
RD39SB-T1
RD9.1SB2
RD9.1SB2-T1



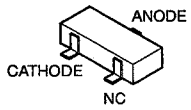
D10SC4M
D10SC6M
D10SC6M(RECTI)



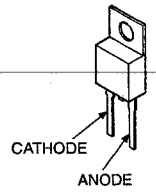
D10XB80



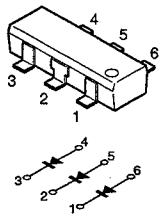
DAN202U
DAN202UT106



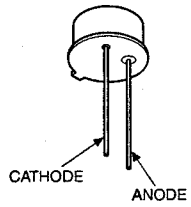
FSF10A60



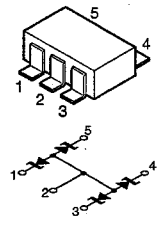
HN1D03FU-TE85L
HN1D03FU-TE85R



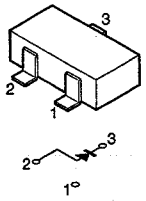
MA3J14700LSO



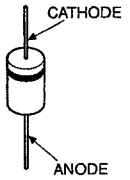
NNCD5.6LG-T1



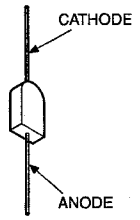
RD18M-B1
RD18M-T1B1



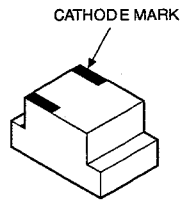
RD3.9SB
RD3.9SB-T1
UF4005PKG23



RM11A
RM11C(RECTI)



SEC1801C
SEC1901C
SEC2422C



Section 4
Spare Parts

4-1. Notes on Repair Parts

1. Safety Related Components Warning

WARNING

Components marked ⚠ are critical to safe operation. Therefore, specified parts should be used in the case of replacement.

WARNHINWEIS

Les composants identifiés par la marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

2. Standardization of Parts

Some repair parts supplied by Sony differ from those used for the unit. These are because of parts commonality and improvement.
Parts List has the present standardized repair parts.

3. Stock of Parts

Parts marked with "o" at SP (Supply Code) column of the Spare Parts list may not be stocked. Therefore, the delivery date will be delayed.
Items with no part number and no description are not stocked because they are seldom required for routine service.

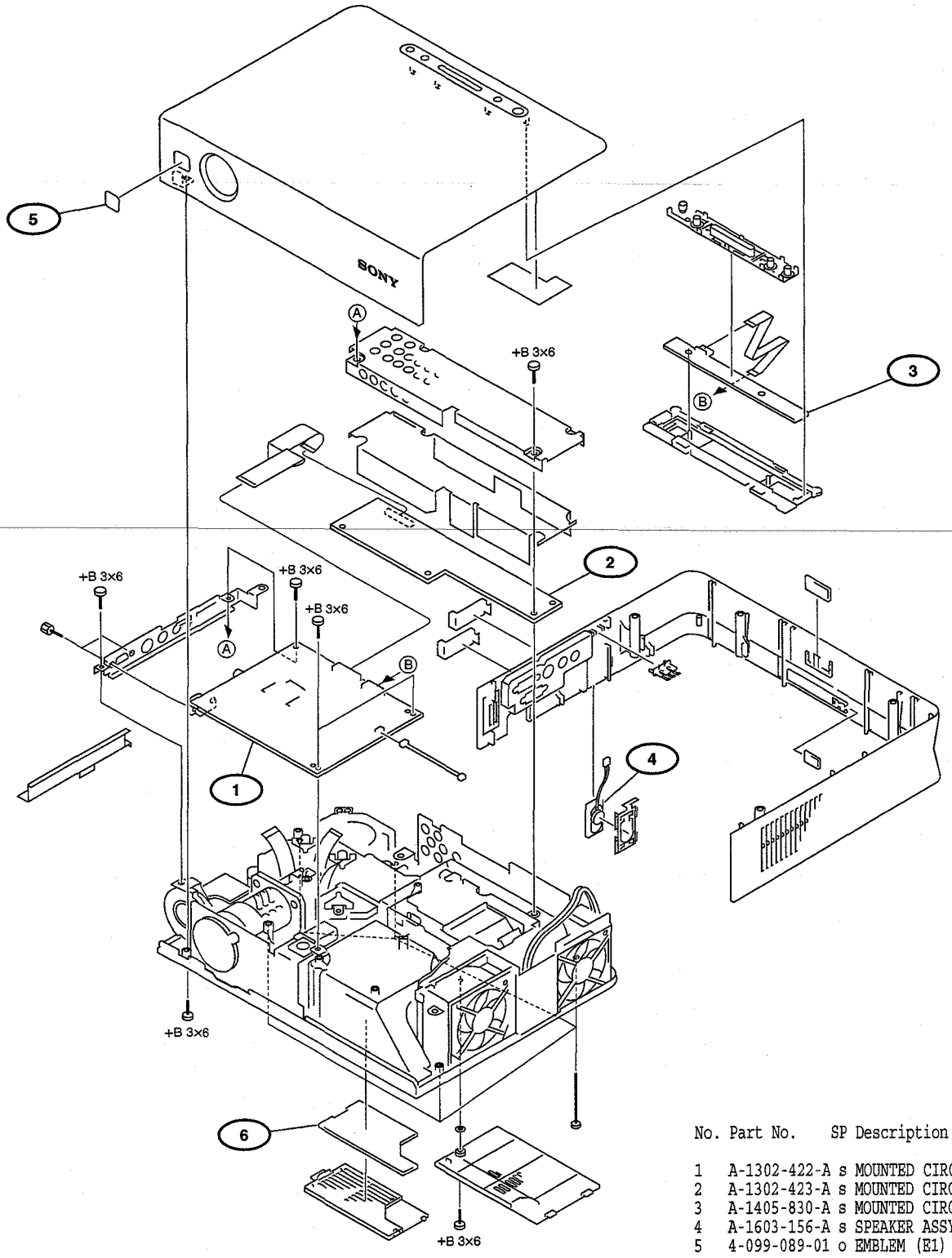
4. Units for Capacitors, Inductors and Resistors

The following units are assumed in Schematic Diagrams, Electrical Parts List and Exploded Views unless otherwise specified.

Capacitors	: μF
Inductors	: μH
Resistors	: Ω

Cover

4-2. Exploded Views



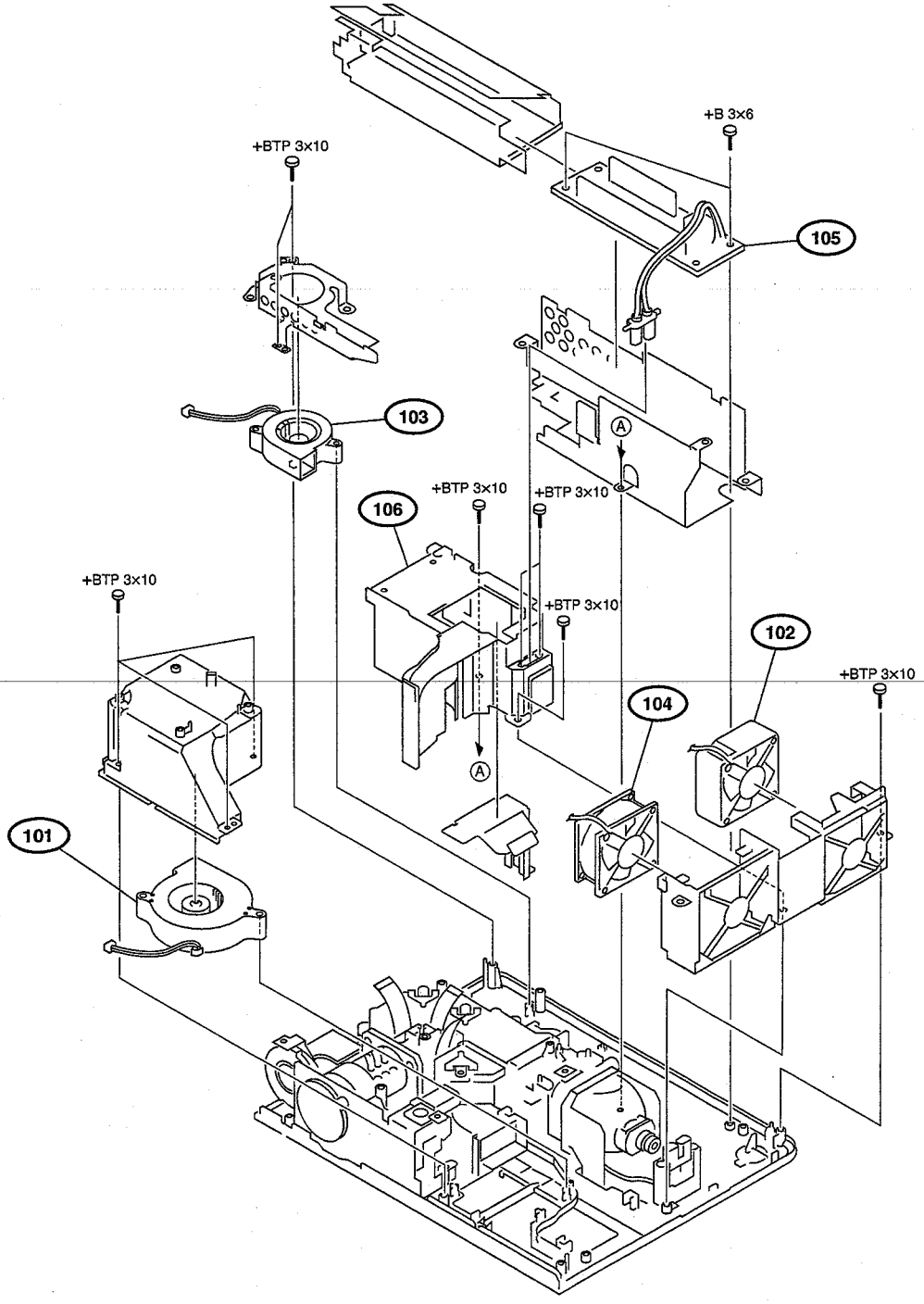
No. Part No. SP Description

1 A-1302-422-A s MOUNTED CIRCUIT BOARD, C
2 A-1302-423-A s MOUNTED CIRCUIT BOARD, G
3 A-1405-830-A s MOUNTED CIRCUIT BOARD, H
4 A-1603-156-A s SPEAKER ASSY
5 4-099-089-01 o EMBLEM (E1)

6 ⚠ 4-099-113-01 s FILTER (E1)

Screws/Washers

7-682-547-04 s SCREW +B 3X6



No. Part No. SP Description

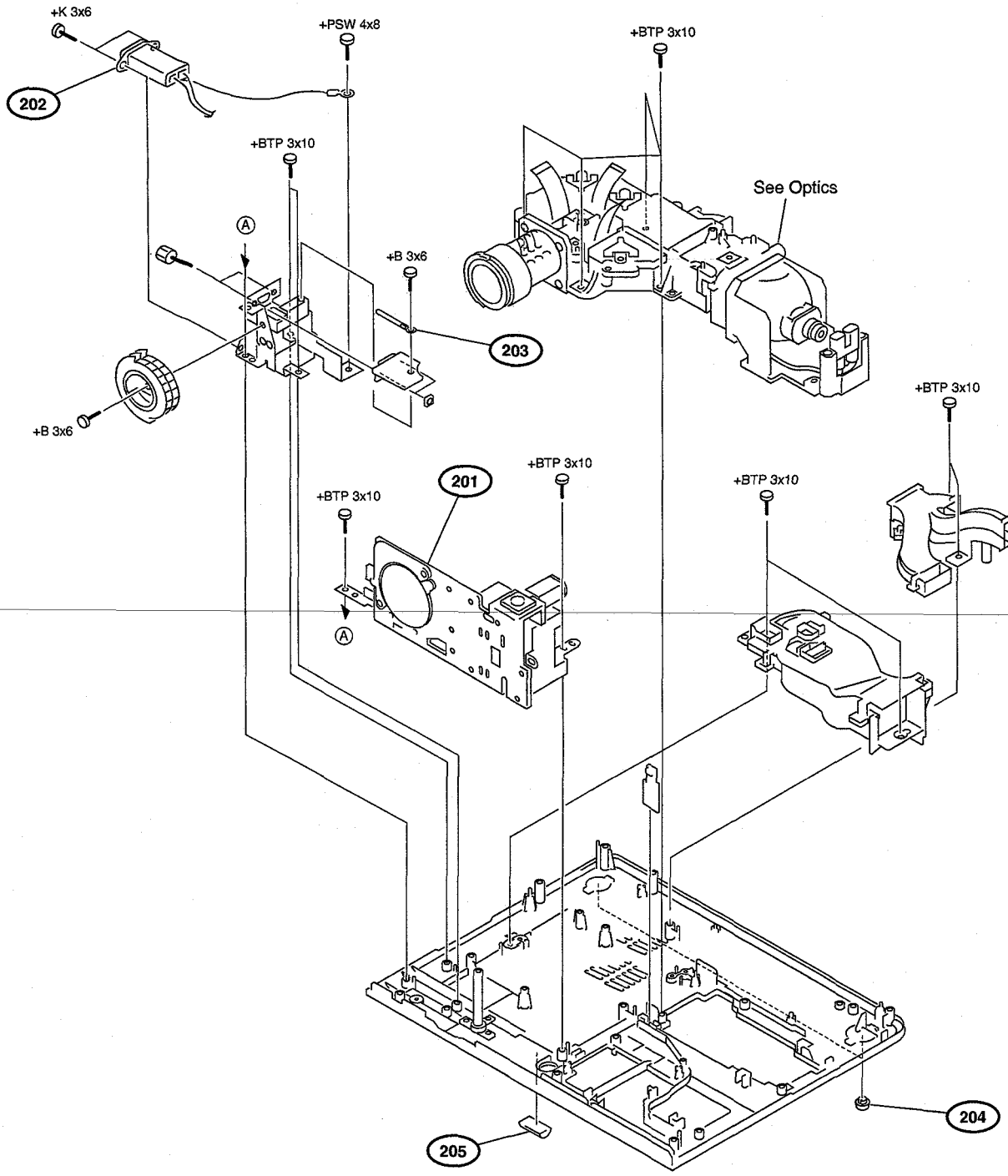
101 ⚠ 1-787-065-21 s D.C. FAN (SIROCCO)
102 ⚠ 1-787-078-11 s DC FAN (60mm)
103 ⚠ 1-787-079-11 s D.C. FAN (SIROCCO) (For Lamp)
104 ⚠ 1-787-080-11 s DC FAN (70mm)
105 ⚠ 1-468-803-11 s LAMP POWER SUPPLY

106 4-099-158-01 s HOUS, LAMP

Screws/Washers

7-685-547-19 s SCREW +BTP 3X10 (EP-FE/ZNBK/CM2)
7-682-547-04 s SCREW +B 3X6

Base

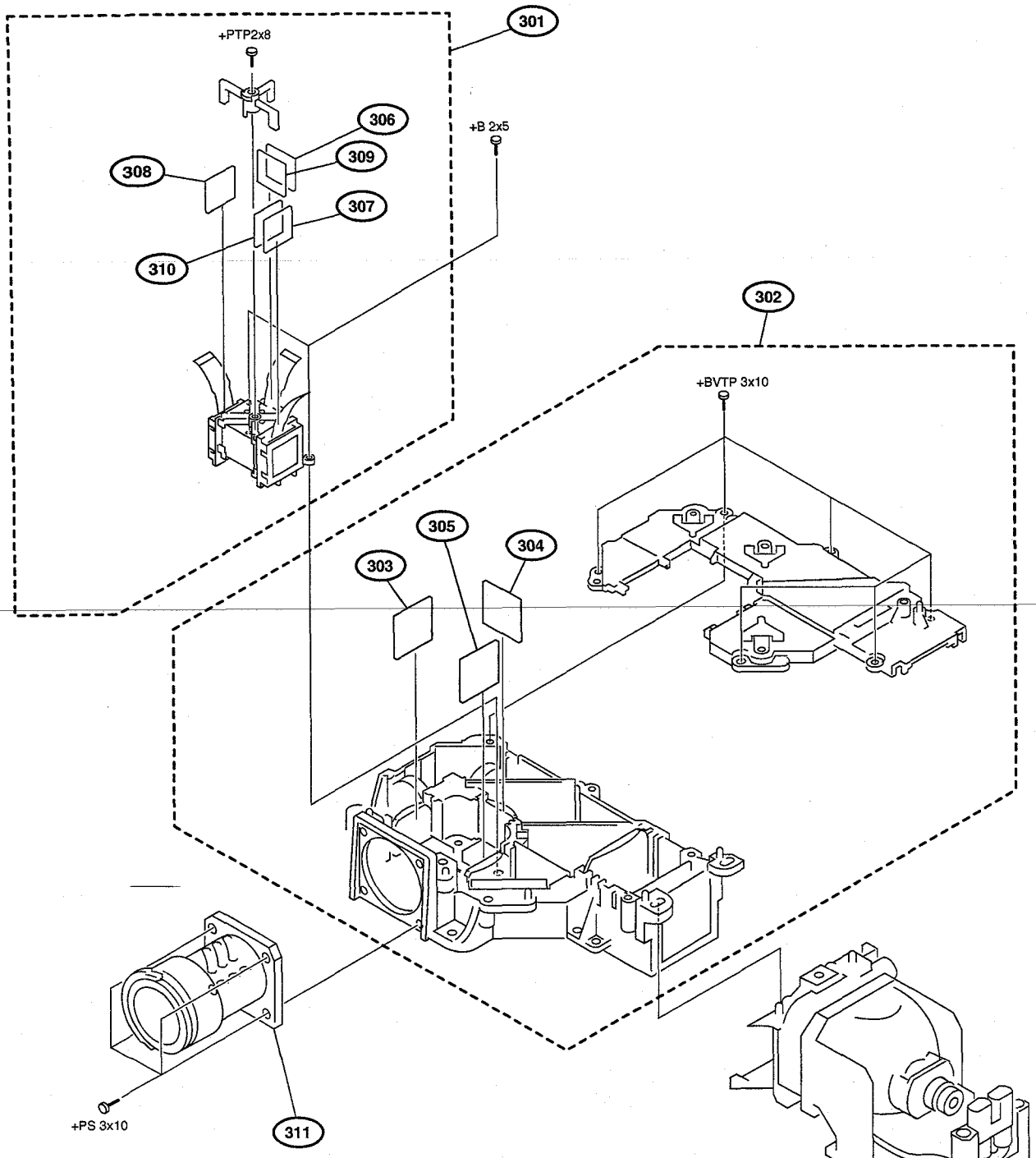


No. Part No. SP Description

201 ⚠ A-1605-745-A s ADJUSTOR BLOCK ASSY
202 ⚠ 1-818-098-11 s INLET, AC (WITH NISE FILTER)
203 3-701-822-01 s HOLDER, WIRE
204 4-084-604-11 s FOOT, REAR
205 4-096-049-01 s FOOT, FRONT

Screws/Washers

7-682-247-09 s SCREW +K 3X6
7-682-547-04 s SCREW +B 3X6
7-685-547-19 s SCREW +BTP 3X10 (EP-FE/ZNBK/CM2)
7-682-961-01 s SCREW +PSW 4X8



No.	Part No.	SP	Description
301	A-1606-247-A	s	PRISM BLOCK ASSY
302	A-1606-246-A	s	OPT UNIT ASSY
303	A-1606-250-A	s	INCIDENCE POLARIZER (R) ASSY
304	A-1606-251-A	s	INCIDENCE POLARIZER (G) ASSY
305	A-1606-252-A	s	INCIDENCE POLARIZER (B) ASSY
306	A-1606-253-A	s	PRE RADIATION POLARIZER (G) ASSY
307	A-1606-254-A	s	PRE RADIATION POLARIZER (B) ASSY
308	A-1606-255-A	s	RADIATION POLARIZER (R) ASSY
309	A-1606-256-A	s	RADIATION POLARIZER (G) ASSY
310	A-1606-257-A	s	RADIATION POLARIZER (B) ASSY
311	A-1606-248-A	s	PROJECTION LENS ASSY

Screws/Washers

7-621-771-06	s	SCREW +B 2X5
7-685-105-11	s	SCREW +PTP 2X8 (EP-FE/ZNBK/CM2)
7-685-647-79	s	SCREW +BVTP 3X10 (EP-FE/ZNBK/CM2)
7-682-649-09	s	SCREW +PS 3X10 (EP-FE/ZNBK/CM2)

4-3. Electrical Parts List

C BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-1302-422-A	s	MOUNTED CIRCUIT BOARD, C
C101	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C102	1-127-715-11	s	CAPACITOR,CERAMIC 0.22MF B1608
C103	1-127-715-11	s	CAPACITOR,CERAMIC 0.22MF B1608
C104	1-127-715-11	s	CAPACITOR,CERAMIC 0.22MF B1608
C105	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C106	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C107	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C108	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C109	1-119-923-11	s	CAPACITOR,CHIP CERAMIC 0.047MF
C110	1-164-937-11	s	CAPACITOR,CHIP CERAMIC 1000PF
C111	1-135-995-91	s	CAP,CHIP CERAMIC39000PF B 1608
C112	1-117-446-11	s	CAPACITOR CERAMIC 3900PF 16V
C113	1-119-923-11	s	CAPACITOR,CHIP CERAMIC 0.047MF
C114	1-119-923-11	s	CAPACITOR,CHIP CERAMIC 0.047MF
C115	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C116	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C117	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C118	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C119	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C120	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C121	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C122	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C123	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C124	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C125	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C126	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C127	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C128	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C129	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C130	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C131	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C132	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C133	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C134	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C135	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C136	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C137	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C138	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C139	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C140	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C141	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C142	1-164-854-11	s	CAPACITOR CERAMIC 15PF/16V CH
C143	1-164-854-11	s	CAPACITOR CERAMIC 15PF/16V CH
C144	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C145	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C146	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C147	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C148	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C149	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C150	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C152	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C153	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C154	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C155	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C156	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C157	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C158	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C159	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C201	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C205	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C206	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C207	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C208	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C209	1-117-720-11	s	CAPACITOR, CERAMIC 4.7MF/10V F
C210	1-164-937-11	s	CAPACITOR,CHIP CERAMIC 1000PF
C211	1-125-891-11	s	CAPACITOR CERAMIC 0.47MF/10V
C212	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C215	1-137-987-81	s	CAPACITOR,C.CERAMIC 0.068MF
C216	1-117-720-11	s	CAPACITOR, CERAMIC 4.7MF/10V F
C217	1-117-720-11	s	CAPACITOR, CERAMIC 4.7MF/10V F
C218	1-117-370-11	s	CAPACITOR CERAMIC 10MF (3216)
C219	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C220	1-127-715-11	s	CAPACITOR CERAMIC 0.22MF B 1608
C221	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C224	1-117-370-11	s	CAPACITOR CERAMIC 10MF (3216)
C225	1-164-943-11	s	CAPACITOR,CHIP CERAMIC 0.01MF
C227	1-164-874-11	s	CAPACITOR,CHIP CERAMIC 100PF
C228	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C229	1-164-882-11	s	CAPACITOR,CERAMIC 220PF/16V CH
C230	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C231	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C232	1-125-837-91	s	CAPACITOR,CHIP CERAMIC1MF/6.3V
C233	1-164-943-11	s	CAPACITOR,CHIP CERAMIC 0.01MF
C234	1-164-943-11	s	CAPACITOR,CHIP CERAMIC 0.01MF
C236	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C237	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C238	1-125-837-91	s	CAPACITOR,CHIP CERAMIC1MF/6.3V
C239	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C242	1-117-720-11	s	CAPACITOR, CERAMIC 4.7MF/10V F
C243	1-117-720-11	s	CAPACITOR, CERAMIC 4.7MF/10V F
C301	1-119-667-11	s	CAPACITOR CERAMIC 22MF/10V(F)
C302	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C304	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C306	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C308	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C310	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C311	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C312	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C314	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C316	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C317	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C318	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C319	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C321	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C322	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C324	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C325	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C326	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C327	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C328	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C329	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C330	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C331	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C332	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C337	1-119-667-11	s	CAPACITOR CERAMIC 22MF/10V(F)
C339	1-164-852-11	s	CAPACITOR,CHIP CERAMIC 12PF/16

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C340	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C341	1-164-852-11	s	CAPACITOR,CHIP CERAMIC 12PF/16
C343	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C344	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C345	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C347	1-119-667-11	s	CAPACITOR CERAMIC 22MF/10V(F)
C348	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C349	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C350	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C351	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C352	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C353	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C354	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C355	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C356	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C357	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C358	1-119-667-11	s	CAPACITOR CERAMIC 22MF/10V(F)
C359	1-119-667-11	s	CAPACITOR CERAMIC 22MF/10V(F)
C361	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C363	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C364	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C365	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C367	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C368	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C369	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C370	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C371	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C372	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C373	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C374	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C375	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C379	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C380	1-164-852-11	s	CAPACITOR,CHIP CERAMIC 12PF/16
C381	1-164-852-11	s	CAPACITOR,CHIP CERAMIC 12PF/16
C401	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C404	1-164-943-11	s	CAPACITOR,CHIP CERAMIC 0.01MF
C405	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C406	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C407	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C408	1-164-943-11	s	CAPACITOR,CHIP CERAMIC 0.01MF
C409	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C410	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C412	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C413	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C414	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C415	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C416	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C417	1-164-943-11	s	CAPACITOR,CHIP CERAMIC 0.01MF
C418	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C419	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C420	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C421	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C422	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C423	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C426	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C427	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C428	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C429	1-164-943-11	s	CAPACITOR,CHIP CERAMIC 0.01MF
C430	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C431	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C432	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C433	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C434	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C435	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C436	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C437	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C438	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C439	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C441	1-164-943-11	s	CAPACITOR,CHIP CERAMIC 0.01MF
C442	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C443	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C444	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C445	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C501	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C502	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C504	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C506	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C507	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C508	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C509	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C510	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C511	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C512	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C513	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C514	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C515	1-125-827-11	s	CAPACITOR,CERAMIC 1MF/25V
C516	1-125-827-11	s	CAPACITOR,CERAMIC 1MF/25V
C517	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C518	1-164-943-11	s	CAPACITOR,CHIP CERAMIC 0.01MF
C519	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C520	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C521	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C522	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C601	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C602	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C604	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C606	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C607	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C608	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C609	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C610	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C611	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C612	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C613	1-125-827-11	s	CAPACITOR,CERAMIC 1MF/25V
C614	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C615	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C616	1-125-827-11	s	CAPACITOR,CERAMIC 1MF/25V
C651	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C652	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C655	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C656	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C657	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C658	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C659	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C660	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C661	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C662	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C663	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C664	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C665	1-125-827-11	s	CAPACITOR,CERAMIC 1MF/25V
C666	1-125-827-11	s	CAPACITOR,CERAMIC 1MF/25V
C701	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C702	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C703	1-164-943-11	s	CAPACITOR,CHIP CERAMIC 0.01MF
C705	1-117-720-11	s	CAPACITOR, CERAMIC 4.7MF/10V F
C706	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C707	1-164-943-11	s	CAPACITOR,CHIP CERAMIC 0.01MF
C708	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C709	1-164-852-11	s	CAPACITOR,CHIP CERAMIC 12PF/16
C710	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C711	1-164-852-11	s	CAPACITOR,CHIP CERAMIC 12PF/16
C712	1-164-943-11	s	CAPACITOR,CHIP CERAMIC 0.01MF
C713	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C714	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C715	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C716	1-125-837-91	s	CAPACITOR,CHIP CERAMIC1MF/6.3V
C717	1-164-943-11	s	CAPACITOR,CHIP CERAMIC 0.01MF
C727	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C728	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C729	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C801	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C802	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C803	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C804	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C805	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C806	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C807	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C808	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C809	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C810	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C816	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C817	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C818	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C819	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C820	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C821	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C822	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C823	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C824	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C826	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C827	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C828	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C829	1-164-943-11	s	CAPACITOR,CHIP CERAMIC 0.01MF
C830	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C834	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C835	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C836	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C837	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C901	1-164-943-11	s	CAPACITOR,CHIP CERAMIC 0.01MF
C902	1-164-943-11	s	CAPACITOR,CHIP CERAMIC 0.01MF
C903	1-164-943-11	s	CAPACITOR,CHIP CERAMIC 0.01MF
C904	1-117-720-11	s	CAPACITOR, CERAMIC 4.7MF/10V F
C905	1-119-667-11	s	CAPACITOR CERAMIC 22MF/10V(F)
C906	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C907	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C911	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C912	1-117-370-11	s	CAPACITOR CERAMIC 10MF (3216)

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C913	1-117-370-11	s	CAPACITOR CERAMIC 10MF (3216)
C914	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C915	1-164-840-11	s	CAPACITOR,CHIP CERAMIC 1.5PF
C916	1-164-840-11	s	CAPACITOR,CHIP CERAMIC 1.5PF
C917	1-164-840-11	s	CAPACITOR,CHIP CERAMIC 1.5PF
C918	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C919	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C921	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C922	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C924	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C925	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C926	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C927	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C928	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C931	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C932	1-128-992-11	s	CAPACITOR ELECT 47MF 25V
C933	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C934	1-117-370-11	s	CAPACITOR CERAMIC 10MF (3216)
C935	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C936	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C938	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C939	1-125-891-11	s	CAPACITOR CERAMIC 0.47MF/10V
C940	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C941	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C942	1-125-891-11	s	CAPACITOR CERAMIC 0.47MF/10V
C943	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C944	1-117-370-11	s	CAPACITOR CERAMIC 10MF (3216)
C945	1-164-882-11	s	CAPACITOR,CERAMIC 220PF/16V CH
C946	1-131-992-11	s	CAP, CERAMIC 100000PF F 1608
C947	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C948	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C949	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C951	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C953	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
C954	1-162-637-11	s	CAPACITOR,CHIP CERAMIC 0.47MF
C955	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
CN401	1-770-621-21	s	PIN, CONNECTOR 4P
CN501	1-794-823-11	s	CONNECTOR (ZIF), FPC/FFC 32P
CN601	1-794-823-11	s	CONNECTOR (ZIF), FPC/FFC 32P
CN651	1-794-823-11	s	CONNECTOR (ZIF), FPC/FFC 32P
CN702	1-770-629-21	s	PIN, CONNECTOR 12P
CN703	1-770-622-21	s	PIN, CONNECTOR 5P
CN802	1-770-621-21	s	PIN, CONNECTOR 4P
CN803	1-770-623-21	s	PIN, CONNECTOR 6P
CN804	1-764-829-11	o	CONNECTOR, FPC 24P
CN805	1-691-491-21	s	CONNECTOR, FFC/FPC 12P
CN806	1-580-055-21	o	PIN, CONNECTOR 2P
CN807	1-770-622-21	s	PIN, CONNECTOR 5P
CN809	1-580-056-21	s	PIN,CONNECTOR 3P
CN810	1-580-056-21	o	PIN,CONNECTOR 3P
CN811	1-580-056-21	o	PIN,CONNECTOR 3P
CN812	1-580-056-21	s	PIN,CONNECTOR 3P
CN901	1-784-828-11	s	CONNECTOR, D SUB
CN902	1-770-860-11	s	CONNECTOR, S TERMINAL
CN904	1-770-626-21	s	PIN, CONNECTOR (L TYPE) 9P
CN905	1-770-622-21	s	PIN, CONNECTOR 5P
CN906	1-580-055-21	o	PIN, CONNECTOR 2P

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
D201	8-719-988-61	s	DIODE 1SS355TE-17
D202	8-719-988-61	s	DIODE 1SS355TE-17
D701	8-719-024-77	s	DIODE HN1D03FU-TE85L
D702	8-719-988-61	s	DIODE 1SS355TE-17
D703	8-719-988-61	s	DIODE 1SS355TE-17
D709	8-719-036-80	s	DIODE RD3.9SB
D711	8-719-036-80	s	DIODE RD3.9SB
D712	8-719-059-53	s	DIODE MA3J14700LSO
D713	8-719-055-30	s	DIODE D1FS4A-TA
D714	8-719-055-30	s	DIODE D1FS4A-TA
D801	8-719-045-53	s	DIODE SEC1801C
D802	8-719-045-61	s	DIODE SEC1901C
D803	8-719-045-61	s	DIODE SEC1901C
D805	8-719-036-80	s	DIODE RD3.9SB
D807	8-719-941-86	s	DIODE DAN202U
D808	8-719-941-86	s	DIODE DAN202U
D809	8-719-081-38	s	DIODE NNCD5.6LG-T1
D810	8-719-055-30	s	DIODE D1FS4A-TA
D811	8-719-055-30	s	DIODE D1FS4A-TA
D901	8-719-081-38	s	DIODE NNCD5.6LG-T1
D902	8-719-036-80	s	DIODE RD3.9SB
D903	8-719-036-80	s	DIODE RD3.9SB
D904	8-719-036-80	s	DIODE RD3.9SB
D905	8-719-059-53	s	DIODE MA3J14700LSO
D906	8-719-059-53	s	DIODE MA3J14700LSO
D907	8-719-059-53	s	DIODE MA3J14700LSO
D908	8-719-024-77	s	DIODE HN1D03FU-TE85L
D909	8-719-941-86	s	DIODE DAN202U
D910	8-719-158-37	s	DIODE RD9.1SB2
D911	8-719-158-37	s	DIODE RD9.1SB2
D914	8-719-059-53	s	DIODE MA3J14700LSO
D915	8-719-059-53	s	DIODE MA3J14700LSO
D916	8-719-059-53	s	DIODE MA3J14700LSO
D917	8-719-024-77	s	DIODE HN1D03FU-TE85L
FB101	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB102	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB103	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB104	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB105	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB106	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB107	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB301	1-500-451-11	s	MICRO INDUCTOR (CHIP) 41P750S
FB302	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB303	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB305	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB306	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB401	1-500-451-11	s	MICRO INDUCTOR (CHIP) 41P750S
FB801	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB802	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB803	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB804	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB805	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB806	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB807	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB808	1-500-451-11	s	MICRO INDUCTOR (CHIP) 41P750S
FB809	1-500-451-11	s	MICRO INDUCTOR (CHIP) 41P750S
FB810	1-500-451-11	s	MICRO INDUCTOR (CHIP) 41P750S
FB811	1-500-451-11	s	MICRO INDUCTOR (CHIP) 41P750S
FB812	1-500-451-11	s	MICRO INDUCTOR (CHIP) 41P750S

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
FB813	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB814	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB815	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB816	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB817	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB818	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB819	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB820	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB821	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB822	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB823	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB824	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB825	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB901	1-216-809-11	s	RESISTOR, CHIP 100 1/10W 1608
FB902	1-500-282-11	o	INDUCTOR, FERRITE BEAD
FB903	1-500-282-11	o	INDUCTOR, FERRITE BEAD
FB904	1-500-282-11	o	INDUCTOR, FERRITE BEAD
FB905	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB906	1-414-921-11	s	INDUCTOR, FERRITE BEAD
IC101	6-704-958-01	s	IC AIC1117A-18PYJTR
IC102	6-704-986-01	s	IC PW2200-05L
IC103	6-703-225-01	s	IC S-80928CNMC-G8YT2G
IC202	8-759-646-02	s	IC M52347FP-TE
IC203	8-752-108-35	s	IC CXA2171AQ
IC204	8-759-548-95	s	IC SN74LV00APWR
IC205	8-759-549-14	s	IC SN74LV244APWR
IC302	8-759-475-43	s	IC TC74LCX125FT(EL)
IC303	6-703-225-01	s	IC S-80928CNMC-G8YT2G
IC304	6-704-929-01	s	IC CY25023SZC-1T
IC305	8-759-548-96	s	IC SN74LV02APWR
IC306	6-803-568-01	s	IC MX29LV800ATTC-70G-751PW100
IC401	8-752-424-18	s	IC CXD3536R
IC402	8-759-831-52	s	IC TC7WH125FK(TE85R)
IC403	6-703-225-01	s	IC S-80928CNMC-G8YT2G
IC404	6-703-225-01	s	IC S-80928CNMC-G8YT2G
IC407	8-759-679-58	s	IC SN74AHCT541PWR
IC408	8-759-679-58	s	IC SN74AHCT541PWR
IC409	8-759-679-58	s	IC SN74AHCT541PWR
IC410	8-759-490-43	s	IC TC74VHCT540AFT(EL)
IC501	8-752-110-22	s	IC CXA7005R-T4
IC502	8-759-252-41	s	IC TK11900MTL
IC503	8-759-579-31	s	IC PQ20WZ1U
IC504	8-759-679-05	s	IC TC7WH34FU(TE12R)
IC601	8-752-110-22	s	IC CXA7005R-T4
IC651	8-752-110-22	s	IC CXA7005R-T4
IC701	6-704-953-01	s	IC AIC1117A-33PYJTR
IC704	6-703-225-01	s	IC S-80928CNMC-G8YT2G
IC801	6-704-954-01	s	IC AIC1117A-50PYJTR
IC802	6-702-301-01	s	IC TK11125CSCL-G
IC803	6-704-954-01	s	IC AIC1117A-50PYJTR
IC804	6-704-958-01	s	IC AIC1117A-18PYJTR
IC805	6-704-953-01	s	IC AIC1117A-33PYJTR
IC806	6-704-952-01	s	IC AIC1084-PEJTR
IC807	8-759-643-48	s	IC BA00ASFP-E2
IC808	8-759-643-48	s	IC BA00ASFP-E2
IC809	8-759-643-48	s	IC BA00ASFP-E2
IC901	8-759-661-55	s	IC ST24FC21M6TR
IC902	8-759-833-99	s	IC MC74HC4052ADTR2
IC903	6-705-510-01	s	IC MAX4382EUD+TG069

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC904	8-759-090-19	s	IC SN75453BPS
IC908	8-759-352-94	s	IC TDA7309D013TR
IC909	8-759-460-79	s	IC BA09FP-E2
IC911	8-759-580-33	s	IC BA6288FS-E2
IC912	8-759-714-09	s	IC ADXL202JE-REEL
IC913	8-759-575-16	s	IC LMC7101BIM5X
IC914	6-702-697-01	s	IC TPA2001D1PWR
IC915	8-759-831-52	s	IC TC7WH125FK(TE85R)
J901	1-785-549-41	o	JACK, PIN YELLOW
J902	1-566-822-21	s	JACK
L101	1-469-522-11	s	INDUCTOR 1.0UH (NLFV25)
L102	1-469-522-11	s	INDUCTOR 1.0UH (NLFV25)
L103	1-469-522-11	s	INDUCTOR 1.0UH (NLFV25)
L104	1-469-522-11	s	INDUCTOR 1.0UH (NLFV25)
L201	1-469-522-11	s	INDUCTOR 1.0UH (NLFV25)
L202	1-469-522-11	s	INDUCTOR 1.0UH (NLFV25)
L301	1-469-528-91	s	INDUCTOR 100UH (NLFV25)
L401	1-469-522-11	s	INDUCTOR 1.0UH (NLFV25)
L501	1-469-522-11	s	INDUCTOR 1.0UH (NLFV25)
L503	1-469-522-11	s	INDUCTOR 1.0UH (NLFV25)
L504	1-469-522-11	s	INDUCTOR 1.0UH (NLFV25)
L601	1-469-522-11	s	INDUCTOR 1.0UH (NLFV25)
L603	1-469-522-11	s	INDUCTOR 1.0UH (NLFV25)
L604	1-469-522-11	s	INDUCTOR 1.0UH (NLFV25)
L651	1-469-522-11	s	INDUCTOR 1.0UH (NLFV25)
L653	1-469-522-11	s	INDUCTOR 1.0UH (NLFV25)
L654	1-469-522-11	s	INDUCTOR 1.0UH (NLFV25)
L901	1-469-522-11	s	INDUCTOR 1.0UH (NLFV25)
L902	1-469-522-11	s	INDUCTOR 1.0UH (NLFV25)
L903	1-469-522-11	s	INDUCTOR 1.0UH (NLFV25)
Q201	8-729-905-35	s	TRANSISTOR 2SC4081-R
Q202	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q203	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q204	8-729-026-53	s	TRANSISTOR 2SA1576A-T106-QR
Q205	8-729-907-00	s	TRANSISTOR DTC114EU
Q206	8-729-026-53	s	TRANSISTOR 2SA1576A-T106-QR
Q207	8-729-026-53	s	TRANSISTOR 2SA1576A-T106-QR
Q209	8-729-905-35	s	TRANSISTOR 2SC4081-R
Q403	8-729-905-35	s	TRANSISTOR 2SC4081-R
Q404	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q405	8-729-907-00	s	TRANSISTOR DTC114EU
Q501	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q502	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q601	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q602	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q651	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q652	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q701	6-550-014-01	s	TRANSISTOR SSM6N15FU(TE85R)
Q702	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q703	6-550-014-01	s	TRANSISTOR SSM6N15FU(TE85R)
Q704	6-550-014-01	s	TRANSISTOR SSM6N15FU(TE85R)
Q706	8-729-907-00	s	TRANSISTOR DTC114EU
Q801	8-729-905-35	s	TRANSISTOR 2SC4081-R
Q802	8-729-028-73	s	TRANSISTOR DTA114EUA-T106
Q803	8-729-028-73	s	TRANSISTOR DTA114EUA-T106
Q804	8-729-028-73	s	TRANSISTOR DTA114EUA-T106
Q806	8-729-427-72	s	TRANSISTOR XP4501-TXE
Q807	8-729-427-72	s	TRANSISTOR XP4501-TXE

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
Q808	8-729-026-53	s	TRANSISTOR 2SA1576A-T106-QR
Q901	8-729-907-00	s	TRANSISTOR DTC114EU
Q902	8-729-907-00	s	TRANSISTOR DTC114EU
Q903	8-729-907-00	s	TRANSISTOR DTC114EU
Q904	8-729-907-00	s	TRANSISTOR DTC114EU
R109	1-218-945-11	s	RESISTOR,CHIP 220 1/16W(1005)
R110	1-218-945-11	s	RESISTOR,CHIP 220 1/16W(1005)
R111	1-218-945-11	s	RESISTOR,CHIP 220 1/16W(1005)
R112	1-218-945-11	s	RESISTOR,CHIP 220 1/16W(1005)
R113	1-218-945-11	s	RESISTOR,CHIP 220 1/16W(1005)
R114	1-218-945-11	s	RESISTOR,CHIP 220 1/16W(1005)
R115	1-208-695-11	s	RESISTOR CHIP 3.3K 1/16W(1005)
R126	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R127	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R129	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R130	1-218-989-11	s	RESISTOR,CHIP 1M 1/16W (1005)
R132	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R133	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R137	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R138	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R139	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R140	1-218-941-81	s	C-RES,V 100-1/16W J
R141	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R143	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R145	1-218-941-81	s	C-RES,V 100-1/16W J
R146	1-218-941-81	s	C-RES,V 100-1/16W J
R147	1-218-941-81	s	C-RES,V 100-1/16W J
R148	1-218-941-81	s	C-RES,V 100-1/16W J
R149	1-218-941-81	s	C-RES,V 100-1/16W J
R150	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R151	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R156	1-218-937-11	s	RESISTOR, CHIP 47
R157	1-218-937-11	s	RESISTOR, CHIP 47
R158	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R159	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R169	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R170	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R171	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R172	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R173	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R174	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R175	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R176	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R177	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R179	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R202	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R203	1-208-635-11	s	RESISTOR CHIP 10 1/16W (1005)
R204	1-208-635-11	s	RESISTOR CHIP 10 1/16W (1005)
R205	1-218-953-11	s	RESISTOR, CHIP 1K 1/16W
R206	1-218-961-11	s	RESISTOR, CHIP 4.7K 1/16W
R207	1-218-937-11	s	RESISTOR, CHIP 47
R208	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R209	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R210	1-208-635-11	s	RESISTOR CHIP 10 1/16W (1005)
R211	1-218-953-11	s	RESISTOR, CHIP 1K 1/16W
R212	1-218-953-11	s	RESISTOR, CHIP 1K 1/16W
R213	1-218-953-11	s	RESISTOR, CHIP 1K 1/16W
R214	1-218-953-11	s	RESISTOR, CHIP 1K 1/16W
R216	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R217	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R220	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R221	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R222	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R223	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R224	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R225	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R228	1-219-601-11	s	RES, METAL FILM CHIP 62K(1005)
R229	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R230	1-218-953-11	s	RESISTOR, CHIP 1K 1/16W
R231	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R232	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R234	1-218-941-81	s	C-RES,V 100-1/16W J
R235	1-218-941-81	s	C-RES,V 100-1/16W J
R237	1-218-961-11	s	RESISTOR, CHIP 4.7K 1/16W
R241	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R243	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R244	1-208-695-11	s	RESISTOR CHIP 3.3K 1/16W(1005)
R245	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R246	1-218-945-11	s	RESISTOR,CHIP 220 1/16W(1005)
R247	1-218-957-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R248	1-218-937-11	s	RESISTOR, CHIP 47
R249	1-218-937-11	s	RESISTOR, CHIP 47
R250	1-218-937-11	s	RESISTOR, CHIP 47
R251	1-208-707-11	s	RESISTOR,CHIP 10K 1/16W (1005)
R252	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R253	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R254	1-218-937-11	s	RESISTOR, CHIP 47
R255	1-218-937-11	s	RESISTOR, CHIP 47
R256	1-208-683-11	s	RESISTOR CHIP 1K 1/16W (1005)
R257	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R259	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R262	1-208-947-11	s	RESISTOR CHIP 330K 1/16W(1005)
R263	1-218-937-11	s	RESISTOR, CHIP 47
R264	1-218-937-11	s	RESISTOR, CHIP 47
R266	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R270	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R271	1-218-949-11	s	RESISTOR,CHIP 470 1/16W
R272	1-218-949-11	s	RESISTOR,CHIP 470 1/16W
R307	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R310	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R311	1-218-941-81	s	C-RES,V 100-1/16W J
R312	1-218-953-11	s	RESISTOR, CHIP 1K 1/16W
R314	1-218-953-11	s	RESISTOR, CHIP 1K 1/16W
R315	1-218-941-81	s	C-RES,V 100-1/16W J
R316	1-218-961-11	s	RESISTOR, CHIP 4.7K 1/16W
R317	1-218-941-81	s	C-RES,V 100-1/16W J
R318	1-218-961-11	s	RESISTOR, CHIP 4.7K 1/16W
R325	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R327	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R328	1-208-643-11	s	RESISTOR CHIP 22 1/16W (1005)
R330	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R333	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R337	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R339	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R341	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R344	1-218-957-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R345	1-208-643-11	s	RESISTOR CHIP 22 1/16W (1005)
R346	1-208-643-11	s	RESISTOR CHIP 22 1/16W (1005)

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R347	1-208-643-11	s	RESISTOR CHIP 22 1/16W (1005)
R349	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R350	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R351	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R353	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R354	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R356	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R360	1-216-815-11	s	RESISTOR,CHIP 330 1/10W 1608
R401	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R402	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R403	1-218-937-11	s	RESISTOR, CHIP 47
R404	1-218-937-11	s	RESISTOR, CHIP 47
R405	1-218-937-11	s	RESISTOR, CHIP 47
R406	1-218-937-11	s	RESISTOR, CHIP 47
R414	1-208-643-11	s	RESISTOR CHIP 22 1/16W (1005)
R416	1-208-643-11	s	RESISTOR CHIP 22 1/16W (1005)
R418	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R420	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R422	1-218-937-11	s	RESISTOR, CHIP 47
R423	1-218-937-11	s	RESISTOR, CHIP 47
R424	1-218-937-11	s	RESISTOR, CHIP 47
R426	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R428	1-218-941-81	s	C-RES,V 100-1/16W J
R429	1-218-957-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R430	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R431	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R432	1-218-961-11	s	RESISTOR, CHIP 4.7K 1/16W
R433	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R434	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R435	1-218-961-11	s	RESISTOR, CHIP 4.7K 1/16W
R436	1-218-961-11	s	RESISTOR, CHIP 4.7K 1/16W
R437	1-218-953-11	s	RESISTOR, CHIP 1K 1/16W
R440	1-218-961-11	s	RESISTOR, CHIP 4.7K 1/16W
R441	1-218-961-11	s	RESISTOR, CHIP 4.7K 1/16W
R442	1-218-957-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R443	1-218-937-11	s	RESISTOR, CHIP 47
R444	1-218-937-11	s	RESISTOR, CHIP 47
R447	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R502	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R503	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R504	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R505	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R506	1-218-941-81	s	C-RES,V 100-1/16W J
R507	1-218-957-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R508	1-218-957-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R509	1-208-635-11	s	RESISTOR CHIP 10 1/16W (1005)
R510	1-208-635-11	s	RESISTOR CHIP 10 1/16W (1005)
R512	1-218-937-11	s	RESISTOR, CHIP 47
R514	1-218-978-11	s	RESISTOR,CHIP 120K 1/16W(1005)
R515	1-218-966-11	s	RESISTOR, CHIP 12K
R516	1-208-683-11	s	RESISTOR CHIP 1K 1/16W (1005)
R517	1-208-699-11	s	RESISTOR,CHIP 4.7K 1/16W(1005)
R601	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R602	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R604	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R605	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R606	1-218-941-81	s	C-RES,V 100-1/16W J
R607	1-218-957-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R608	1-218-957-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R609	1-208-635-11	s	RESISTOR CHIP 10 1/16W (1005)
R610	1-208-635-11	s	RESISTOR CHIP 10 1/16W (1005)
R612	1-218-937-11	s	RESISTOR, CHIP 47
R652	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R653	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R655	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R656	1-218-941-81	s	C-RES,V 100-1/16W J
R657	1-218-957-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R658	1-218-957-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R659	1-208-635-11	s	RESISTOR CHIP 10 1/16W (1005)
R660	1-208-635-11	s	RESISTOR CHIP 10 1/16W (1005)
R662	1-218-937-11	s	RESISTOR, CHIP 47
R702	1-218-937-11	s	RESISTOR, CHIP 47
R705	1-218-941-81	s	C-RES,V 100-1/16W J
R706	1-208-699-11	s	RESISTOR,CHIP 4.7K 1/16W(1005)
R707	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R709	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R710	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R711	1-218-961-11	s	RESISTOR, CHIP 4.7K 1/16W
R712	1-218-961-11	s	RESISTOR, CHIP 4.7K 1/16W
R713	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R714	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R715	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R716	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R717	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R718	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R719	1-218-957-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R720	1-218-957-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R721	1-218-957-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R722	1-218-957-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R723	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R724	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R725	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R726	1-208-635-11	s	RESISTOR CHIP 10 1/16W (1005)
R727	1-218-945-11	s	RESISTOR,CHIP 220 1/16W(1005)
R728	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R729	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R730	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R731	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R732	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R733	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R735	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R736	1-218-953-11	s	RESISTOR, CHIP 1K 1/16W
R737	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R739	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R741	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R742	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R743	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R744	1-218-971-11	s	RESISTOR,CHIP 33K 1/16W (1005)
R745	1-218-971-11	s	RESISTOR,CHIP 33K 1/16W (1005)
R748	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R749	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R750	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R751	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R752	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R753	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R756	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R757	1-208-683-11	s	RESISTOR CHIP 1K 1/16W (1005)
R758	1-208-683-11	s	RESISTOR CHIP 1K 1/16W (1005)

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R759	1-218-941-81	s	C-RES,V 100-1/16W J
R760	1-218-941-81	s	C-RES,V 100-1/16W J
R761	1-218-941-81	s	C-RES,V 100-1/16W J
R762	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R763	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R766	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R767	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R768	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R773	1-218-941-81	s	C-RES,V 100-1/16W J
R774	1-218-941-81	s	C-RES,V 100-1/16W J
R776	1-218-941-81	s	C-RES,V 100-1/16W J
R778	1-218-961-11	s	RESISTOR, CHIP 4.7K 1/16W
R779	1-218-961-11	s	RESISTOR, CHIP 4.7K 1/16W
R782	1-218-941-81	s	C-RES,V 100-1/16W J
R783	1-218-941-81	s	C-RES,V 100-1/16W J
R784	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R785	1-208-699-11	s	RESISTOR,CHIP 4.7K 1/16W(1005)
R801	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R802	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R803	1-218-953-11	s	RESISTOR, CHIP 1K 1/16W
R804	1-218-953-11	s	RESISTOR, CHIP 1K 1/16W
R805	1-218-945-11	s	RESISTOR,CHIP 220 1/16W(1005)
R806	1-218-941-81	s	C-RES,V 100-1/16W J
R807	1-218-941-81	s	C-RES,V 100-1/16W J
R808	1-218-941-81	s	C-RES,V 100-1/16W J
R814	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R815	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R816	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R817	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R818	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R819	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R820	1-208-707-11	s	RESISTOR,CHIP 10K 1/16W (1005)
R826	1-218-953-11	s	RESISTOR, CHIP 1K 1/16W
R827	1-218-971-11	s	RESISTOR,CHIP 33K 1/16W (1005)
R828	1-218-949-11	s	RESISTOR,CHIP 470 1/16W
R829	1-218-961-11	s	RESISTOR, CHIP 4.7K 1/16W
R830	1-218-971-11	s	RESISTOR,CHIP 33K 1/16W (1005)
R831	1-218-949-11	s	RESISTOR,CHIP 470 1/16W
R832	1-218-961-11	s	RESISTOR, CHIP 4.7K 1/16W
R833	1-218-971-11	s	RESISTOR,CHIP 33K 1/16W (1005)
R834	1-218-949-11	s	RESISTOR,CHIP 470 1/16W
R835	1-218-961-11	s	RESISTOR, CHIP 4.7K 1/16W
R836	1-218-941-81	s	C-RES,V 100-1/16W J
R837	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R839	1-218-969-11	s	RESISTOR,CHIP 22K 1/16W (1608)
R840	1-218-969-11	s	RESISTOR,CHIP 22K 1/16W (1608)
R841	1-218-969-11	s	RESISTOR,CHIP 22K 1/16W (1608)
R842	1-218-969-11	s	RESISTOR,CHIP 22K 1/16W (1608)
R843	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R846	1-218-969-11	s	RESISTOR,CHIP 22K 1/16W (1608)
R847	1-218-947-11	s	RESISTOR, CHIP 330 1/16W
R848	1-218-947-11	s	RESISTOR, CHIP 330 1/16W
R849	1-218-949-11	s	RESISTOR,CHIP 470 1/16W
R850	1-218-945-11	s	RESISTOR,CHIP 220 1/16W(1005)
R851	1-218-945-11	s	RESISTOR,CHIP 220 1/16W(1005)
R852	1-218-957-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R853	1-218-957-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R854	1-218-957-11	s	RESISTOR,CHIP 2.2K 1/16W(1608)
R901	1-218-969-11	s	RESISTOR,CHIP 22K 1/16W (1608)

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R902	1-218-969-11	s	RESISTOR,CHIP 22K 1/16W (1608)
R903	1-218-969-11	s	RESISTOR,CHIP 22K 1/16W (1608)
R904	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R905	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R906	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R907	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R908	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R909	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R910	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R911	1-218-953-11	s	RESISTOR, CHIP 1K 1/16W
R912	1-218-937-11	s	RESISTOR, CHIP 47
R913	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R914	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R915	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R916	1-218-953-11	s	RESISTOR, CHIP 1K 1/16W
R917	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R918	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R919	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R920	1-218-937-11	s	RESISTOR, CHIP 47
R921	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R922	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R923	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R924	1-218-945-11	s	RESISTOR,CHIP 220 1/16W(1005)
R925	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R926	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R927	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R928	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R929	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R930	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R931	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R932	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R933	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R934	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R935	1-218-937-11	s	RESISTOR, CHIP 47
R936	1-218-937-11	s	RESISTOR, CHIP 47
R937	1-218-937-11	s	RESISTOR, CHIP 47
R938	1-218-937-11	s	RESISTOR, CHIP 47
R941	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R944	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R946	1-208-635-11	s	RESISTOR CHIP 10 1/16W (1005)
R953	1-218-945-11	s	RESISTOR,CHIP 220 1/16W(1005)
R954	1-208-635-11	s	RESISTOR CHIP 10 1/16W (1005)
R955	1-218-945-11	s	RESISTOR,CHIP 220 1/16W(1005)
R956	1-218-945-11	s	RESISTOR,CHIP 220 1/16W(1005)
R957	1-218-945-11	s	RESISTOR,CHIP 220 1/16W(1005)
R958	1-218-945-11	s	RESISTOR,CHIP 220 1/16W(1005)
R959	1-208-635-11	s	RESISTOR CHIP 10 1/16W (1005)
R960	1-218-945-11	s	RESISTOR,CHIP 220 1/16W(1005)
R961	1-218-985-11	s	RESISTOR CHIP 470K 1/16W(1005)
R962	1-218-985-11	s	RESISTOR CHIP 470K 1/16W(1005)
R963	1-208-635-11	s	RESISTOR CHIP 10 1/16W (1005)
R964	1-216-815-11	s	RESISTOR,CHIP 330 1/10W 1608
R965	1-218-941-81	s	C-RES,V 100-1/16W J
R966	1-218-941-81	s	C-RES,V 100-1/16W J
R967	1-216-815-11	s	RESISTOR,CHIP 330 1/10W 1608
R968	1-216-815-11	s	RESISTOR,CHIP 330 1/10W 1608
R969	1-208-635-11	s	RESISTOR CHIP 10 1/16W (1005)
R971	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R972	1-208-635-11	s	RESISTOR CHIP 10 1/16W (1005)

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R975	1-218-937-11	s	RESISTOR, CHIP 47
R976	1-218-937-11	s	RESISTOR, CHIP 47
R978	1-216-815-11	s	RESISTOR,CHIP 330 1/10W 1608
R979	1-218-941-81	s	C-RES,V 100-1/16W J
R980	1-218-941-81	s	C-RES,V 100-1/16W J
R981	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R982	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R984	1-218-977-11	s	RESISTOR,CHIP 100K 1/16W(1005)
R985	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R987	1-218-917-11	s	RESISTOR,CHIP 820K 1/10W(1608)
R988	1-218-990-11	s	RESISTOR,CHIP 0 1/16W (1005)
R989	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R990	1-218-977-11	s	RESISTOR,CHIP 100K 1/16W(1005)
R991	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R992	1-218-978-11	s	RESISTOR,CHIP 120K 1/16W(1005)
R993	1-208-643-11	s	RESISTOR CHIP 22 1/16W (1005)
R994	1-208-643-11	s	RESISTOR CHIP 22 1/16W (1005)
R995	1-218-969-11	s	RESISTOR,CHIP 22K 1/16W (1608)
R996	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R997	1-218-965-11	s	RESISTOR, CHIP 10K 1/16W
R998	1-218-977-11	s	RESISTOR,CHIP 100K 1/16W(1005)
RB101	1-233-981-11	s	RES, NETWORK (CHIP TYPE) 0
RB102	1-234-372-11	s	RES, NETWORK 100X4 (1005)
RB103	1-233-981-11	s	RES, NETWORK (CHIP TYPE) 0
RB104	1-233-981-11	s	RES, NETWORK (CHIP TYPE) 0
RB105	1-233-981-11	s	RES, NETWORK (CHIP TYPE) 0
RB106	1-233-981-11	s	RES, NETWORK (CHIP TYPE) 0
RB107	1-233-981-11	s	RES, NETWORK (CHIP TYPE) 0
RB108	1-234-372-11	s	RES, NETWORK 100X4 (1005)
RB109	1-234-372-11	s	RES, NETWORK 100X4 (1005)
RB110	1-234-372-11	s	RES, NETWORK 100X4 (1005)
RB111	1-234-372-11	s	RES, NETWORK 100X4 (1005)
RB112	1-234-372-11	s	RES, NETWORK 100X4 (1005)
RB301	1-233-981-11	s	RES, NETWORK (CHIP TYPE) 0
RB302	1-233-981-11	s	RES, NETWORK (CHIP TYPE) 0
RB303	1-233-981-11	s	RES, NETWORK (CHIP TYPE) 0
RB304	1-233-981-11	s	RES, NETWORK (CHIP TYPE) 0
RB305	1-233-981-11	s	RES, NETWORK (CHIP TYPE) 0
RB306	1-233-981-11	s	RES, NETWORK (CHIP TYPE) 0
RB307	1-233-981-11	s	RES, NETWORK (CHIP TYPE) 0
RB308	1-233-981-11	s	RES, NETWORK (CHIP TYPE) 0
RB401	1-234-370-11	s	RES, NETWORK 22X4 (1005)
RB402	1-234-370-11	s	RES, NETWORK 22X4 (1005)
RB403	1-234-370-11	s	RES, NETWORK 22X4 (1005)
RB404	1-234-370-11	s	RES, NETWORK 22X4 (1005)
RB405	1-234-370-11	s	RES, NETWORK 22X4 (1005)
RB406	1-234-370-11	s	RES, NETWORK 22X4 (1005)
RB407	1-234-371-11	s	RES, NETWORK 47X4 (1005)
RB408	1-234-371-11	s	RES, NETWORK 47X4 (1005)
RB409	1-234-371-11	s	RES, NETWORK 47X4 (1005)
RB410	1-234-371-11	s	RES, NETWORK 47X4 (1005)
RB411	1-234-371-11	s	RES, NETWORK 47X4 (1005)
RB412	1-234-371-11	s	RES, NETWORK 47X4 (1005)
RB413	1-234-371-11	s	RES, NETWORK 47X4 (1005)
RB414	1-234-371-11	s	RES, NETWORK 47X4 (1005)
RB415	1-234-370-11	s	RES, NETWORK 22X4 (1005)
RB501	1-234-370-11	s	RES, NETWORK 22X4 (1005)
RB502	1-234-370-11	s	RES, NETWORK 22X4 (1005)

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
RB503	1-234-370-11	s	RES, NETWORK 22X4 (1005)
RB601	1-234-370-11	s	RES, NETWORK 22X4 (1005)
RB602	1-234-370-11	s	RES, NETWORK 22X4 (1005)
RB603	1-234-370-11	s	RES, NETWORK 22X4 (1005)
RB651	1-234-370-11	s	RES, NETWORK 22X4 (1005)
RB652	1-234-370-11	s	RES, NETWORK 22X4 (1005)
RB653	1-234-370-11	s	RES, NETWORK 22X4 (1005)
RB701	1-234-372-11	s	RES, NETWORK 100X4 (1005)
RB702	1-233-981-11	s	RES, NETWORK (CHIP TYPE) 0
RB705	1-234-372-11	s	RES, NETWORK 100X4 (1005)
RB707	1-234-372-11	s	RES, NETWORK 100X4 (1005)
S401	1-771-337-21	s	SWITCH, SLIDE
TH701	1-803-382-11	s	THERMISTOR (10K)
TH702	1-803-382-11	s	THERMISTOR (10K)
TH901	1-803-615-11	s	THERMISTOR, POSITIVE
X101	1-795-756-11	s	VIBRATOR, CRYSTAL
X201	1-813-124-21	s	VIBRATOR, CERAMIC
X301	1-795-650-21	s	VIBRATOR, CRYSTAL
X302	1-795-650-21	s	VIBRATOR, CRYSTAL
X701	1-795-650-21	s	VIBRATOR, CRYSTAL

G BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-1302-423-A	s	MOUNTED CIRCUIT BOARD, G
3pcs	7-682-648-09	s	SCREW +PS 3X8(EP-FE/ZNBK/CM2)
1pc	4-052-843-01	o	COVER, FUSE
C101	⚠ 1-165-529-31	s	CAP,AC M/P 0.22U 275 M (B8113)
C102	⚠ 1-113-912-11	s	CAPACITOR,CERAMIC .0047MF/250V
C103	⚠ 1-113-912-11	s	CAPACITOR,CERAMIC .0047MF/250V
C104	⚠ 1-165-530-11	s	CAPACITOR,FILM(ACROSS)0.47MF
C105	1-137-639-11	s	CAPACITOR,PE FILM 0.47MF
C106	1-117-228-11	s	CAPACITOR,FILM 2.2MF/450V
C107	⚠ 1-117-751-11	s	CAPACITOR, ELECT 220MF/450V
C108	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C109	1-162-964-11	s	CAPACITOR,CERAMIC 1000PF/50V B
C110	1-127-715-11	s	CAPACITOR,CERAMIC 0.22MF B1608
C111	1-128-403-11	s	CAPACITOR,ELECT 47MF/35V(CHIP)
C112	1-115-339-11	s	CAPACITOR,CERAMIC 0.1MF/50V
C201	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C202	1-162-964-11	s	CAPACITOR,CERAMIC 1000PF/50V B
C203	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C204	1-125-889-11	s	CAPACITOR, C.CERAMIC 2.2MF
C205	1-128-403-11	s	CAPACITOR,ELECT 47MF/35V(CHIP)
C206	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C207	1-128-403-11	s	CAPACITOR,ELECT 47MF/35V(CHIP)
C208	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C209	1-115-339-11	s	CAPACITOR,CERAMIC 0.1MF/50V
C210	1-137-753-11	s	CAPACITOR METALIZED 4700PF
C211	1-107-911-11	s	CAPACITOR,ELECT 220MF/50V
C212	1-115-566-11	s	CAPACITOR,CERAMIC 4.7MF B/6.3V
C214	1-131-976-11	s	CAP, ELECT 820MF
C215	1-135-960-91	s	CAP, CHIP CERAMIC 10MF B(3225)
C216	1-128-946-11	s	CAP, ELECT 2200MF / 10V
C217	1-135-960-91	s	CAP, CHIP CERAMIC 10MF B(3225)
C218	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C219	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C220	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C221	1-135-960-91	s	CAP, CHIP CERAMIC 10MF B(3225)
C222	1-115-339-11	s	CAPACITOR,CERAMIC 0.1MF/50V
C223	1-126-400-11	s	CAPACITOR ELECT 22MF/35V(CHIP)
C224	1-135-960-91	s	CAP, CHIP CERAMIC 10MF B(3225)
C229	1-164-230-11	s	CAPACITOR,CERAMIC 220PF/50V
C230	1-135-343-11	s	CAPACITOR,SOLID ELECT 120MF
C234	1-100-026-11	s	CAPACITOR, ELECT 220MF(8X6.9)
C235	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C236	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C237	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C238	1-126-395-11	s	CAPACITOR,ELECT 22MF/16V(CHIP)
C240	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C241	1-162-927-11	s	CAPACITOR,CERAMIC 100PF/50V CH
CN101	⚠ 1-691-960-11	o	PIN,CONNECTOR (PC BOARD) 3P
CN102	⚠ 1-691-960-21	o	PIN, CONNECTOR (PC BOARD) 3P
CN201	1-764-782-11	o	HOUSING, CONNECTOR 24P
D101	⚠ 6-500-406-01	s	DIODE D10XB80
D102	8-719-304-63	s	DIODE RM11C (RECTI)
D103	⚠ 8-719-060-06	s	DIODE FSF10A60
D104	8-719-510-11	s	DIODE D1FS4
D201	8-719-107-13	s	DIODE RD18M-B1
D202	8-719-073-01	s	DIODE MA111-(K8).S0
D203	8-719-979-64	s	DIODE UF4005PKG23
D204	8-719-055-30	s	DIODE D1FS4A-TA

(G BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
D205	8-719-037-57	s	DIODE RD39SB-T1
D206	8-719-510-09	s	DIODE D10SC6M (RECTI)
D207	8-719-073-01	s	DIODE MA111-(K8).S0
D209	8-719-510-12	s	DIODE D10SC4M
D210	8-719-073-01	s	DIODE MA111-(K8).S0
D212	8-719-073-01	s	DIODE MA111-(K8).S0
D214	8-719-078-04	s	DIODE EC31QS03L-TE12L
D215	8-719-073-01	s	DIODE MA111-(K8).S0
D216	8-719-073-01	s	DIODE MA111-(K8).S0
D217	8-719-073-01	s	DIODE MA111-(K8).S0
D218	8-719-073-01	s	DIODE MA111-(K8).S0
D219	8-719-037-54	s	DIODE RD30SB-T1
F101	⚠ 1-576-232-12	s	FUSE (H.B.C.)
FH101	1-533-223-11	s	CLIP,FUSE
FH102	1-533-223-11	s	CLIP,FUSE
IC102	8-759-382-19	o	IC MC34262DR2
IC201	6-704-429-01	s	IC MCZ3001U
IC202	8-759-183-53	s	IC TL431CPK-E2
IC203	8-759-100-93	s	IC UPC393G2
IC204	8-759-592-79	s	IC BA00AST
IC205	8-759-713-98	s	IC LTC1772CS6
IC206	6-704-954-01	s	IC AIC1117A-50PYJTR
L101	⚠ 1-456-134-21	s	COIL, LINE FILTER
L102	⚠ 1-456-632-11	s	CHOKE COIL 550MMH
L103	⚠ 1-456-133-31	s	COIL, CHOKE 200UH
L201	1-409-527-41	s	COIL, CHOKE 4.7UH
L202	1-409-527-41	s	COIL, CHOKE 4.7UH
L204	1-409-529-41	s	COIL, CHOKE 10UH
L205	1-409-527-41	s	COIL, CHOKE 4.7UH
L207	1-409-527-41	s	COIL, CHOKE 4.7UH
PH201	⚠ 8-749-016-82	s	PHOTO COUPLER PC123GY2
PH202	⚠ 8-749-016-82	s	PHOTO COUPLER PC123GY2
Q101	⚠ 8-729-041-65	s	TRANSISTOR 2SK2195F04
Q102	8-729-230-27	s	TRANSISTOR 2SA1213Y-TE12L
Q201	8-729-052-29	s	TRANSISTOR 2SK2876-01MR-F122
Q202	8-729-052-29	s	TRANSISTOR 2SK2876-01MR-F122
Q203	8-729-216-22	s	TRANSISTOR 2SA1162-G
Q204	8-729-230-49	s	TRANSISTOR 2SC2712-YG
Q205	8-729-047-32	s	TRANSISTOR SI4425DY-T1
Q206	8-729-047-32	s	TRANSISTOR SI4425DY-T1
Q207	8-729-029-14	s	TRANSISTOR DTC144EUA-T106
Q210	8-729-029-14	s	TRANSISTOR DTC144EUA-T106
Q211	8-729-029-14	s	TRANSISTOR DTC144EUA-T106
Q212	8-729-029-14	s	TRANSISTOR DTC144EUA-T106
Q213	8-729-029-14	s	TRANSISTOR DTC144EUA-T106
Q214	8-729-029-14	s	TRANSISTOR DTC144EUA-T106
Q215	8-729-029-14	s	TRANSISTOR DTC144EUA-T106
R101	⚠ 1-219-754-11	s	RESISTOR(SURGE RESISTANT)680K
R102	1-249-393-11	s	RES,CARBON 10 1/4W
R104	1-214-789-00	s	RESISTOR,METAL 0.1/5W
R105	1-218-899-11	s	RESISTOR,CHIP 150K 1/10W(1608)
R106	1-218-907-11	s	RESISTOR,CHIP 330K 1/10W(1608)
R107	1-218-907-11	s	RESISTOR,CHIP 330K 1/10W(1608)
R108	1-218-907-11	s	RESISTOR,CHIP 330K 1/10W(1608)
R110	1-216-817-11	s	RESISTOR,CHIP 470 1/10W 1608
R111	1-218-871-11	s	RESISTOR,CHIP 10K 1/10W (1608)

(G BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R112	1-218-871-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R113	1-218-907-11	s	RESISTOR,CHIP 330K 1/10W(1608)
R114	1-218-907-11	s	RESISTOR,CHIP 330K 1/10W(1608)
R115	1-218-907-11	s	RESISTOR,CHIP 330K 1/10W(1608)
R116	1-218-907-11	s	RESISTOR,CHIP 330K 1/10W(1608)
R117	1-216-837-11	s	RESISTOR,CHIP 22K 1/16W 1608
R118	1-218-871-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R119	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R120	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R201	1-218-875-11	s	RESISTOR,CHIP 15K 1/10W (1608)
R202	1-218-859-11	s	RESISTOR,CHIP 3.3K 1/10W(1608)
R203	1-218-907-11	s	RESISTOR,CHIP 330K 1/10W(1608)
R204	1-218-907-11	s	RESISTOR,CHIP 330K 1/10W(1608)
R205	1-218-907-11	s	RESISTOR,CHIP 330K 1/10W(1608)
R206	1-249-417-11	s	RESISTOR,CARBON 1K 1/4W(SMALL)
R207	1-218-859-11	s	RESISTOR,CHIP 3.3K 1/10W(1608)
R208	1-218-875-11	s	RESISTOR,CHIP 15K 1/10W (1608)
R209	1-216-819-11	s	RESISTOR,CHIP 680 1/10W 1608
R210	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R211	1-216-809-11	s	RESISTOR,CHIP 100 1/10W 1608
R212	1-249-389-11	s	RES,CARBON 4.7 1/4W
R213	1-202-933-61	s	RESISTOR, FUSE 0.1 1/2W
R214	1-216-797-11	s	RESISTOR,CHIP 10 1/10W 1608
R215	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R216	1-216-797-11	s	RESISTOR,CHIP 10 1/10W 1608
R217	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R218	1-216-815-11	s	RESISTOR,CHIP 330 1/10W 1608
R219	1-243-803-71	s	RES, OXIDE METAL FILM 0.33
R220	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R221	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R222	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R223	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R224	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R225	1-216-845-11	s	RESISTOR,CHIP 100K 1/10W(1608)
R226	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R227	1-216-827-11	s	RESISTOR, CHIP 3.3K 1/10W 1608
R228	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R229	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R230	1-216-827-11	s	RESISTOR, CHIP 3.3K 1/10W 1608
R231	1-216-817-11	s	RESISTOR,CHIP 470 1/10W 1608
R232	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R233	1-218-873-11	s	RESISTOR,CHIP 12K 1/10W (1608)
R234	1-218-863-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R235	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R236	1-218-871-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R237	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R238	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R239	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R240	1-216-837-11	s	RESISTOR,CHIP 22K 1/16W 1608
R241	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R242	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R243	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R244	1-216-841-11	s	RESISTOR, CHIP 47K 1/10W 1608
R245	1-218-875-11	s	RESISTOR,CHIP 15K 1/10W (1608)
R246	1-218-879-11	s	RESISTOR,CHIP 22K 1/10W (1608)
R247	1-218-859-11	s	RESISTOR,CHIP 3.3K 1/10W(1608)
R250	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R251	1-218-901-11	s	RESISTOR,CHIP 180K 1/10W(1608)
R252	1-218-883-11	s	RESISTOR,CHIP 33K 1/10W (1608)

(G BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R253	1-219-611-21	s	RESISTOR, CHIP 0.047 1W
R254	1-218-891-11	s	RESISTOR,CHIP 68K 1/10W (1608)
R255	1-216-813-11	s	RESISTOR, CHIP 220 1/10W 1608
R256	1-216-813-11	s	RESISTOR, CHIP 220 1/10W 1608
R257	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R258	1-216-835-11	s	RESISTOR,CHIP 15K 1/10W
R259	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R260	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R261	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R262	1-216-835-11	s	RESISTOR,CHIP 15K 1/10W
R263	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R264	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R265	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/10W 1608
R266	1-216-833-11	s	RESISTOR,CHIP 10K 1/10W (1608)
R267	1-216-835-11	s	RESISTOR,CHIP 15K 1/10W
R268	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/10W(1608)
R269	1-216-797-11	s	RESISTOR,CHIP 10 1/10W 1608
R301	1-216-864-11	s	CONDUCTOR, CHIP (1608)
T202	⚠ 1-437-380-21	s	TRANSFORMER, CONVERTER
TH101	⚠ 1-810-509-11	s	THERMISTOR,POWER
VDR101	⚠ 1-803-830-31	s	VARISTOR (ERZV14D621)

H BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-1405-830-A	s	MOUNTED CIRCUIT BOARD, H
C10	1-125-777-11	s	CAPACITOR CERAMIC 0.1MF/10V
CN10	1-691-491-21	s	CONNECTOR, FFC/FPC 12P
D10	8-719-045-51	s	DIODE SEC2422C
D11	8-719-045-51	s	DIODE SEC2422C
D12	8-719-024-77	s	DIODE HN1D03FU-TE85L
D13	8-719-024-77	s	DIODE HN1D03FU-TE85L
Q10	8-729-028-73	s	TRANSISTOR DTA114EUA-T106
Q11	8-729-028-73	s	TRANSISTOR DTA114EUA-T106
Q12	8-729-427-72	s	TRANSISTOR XP4501-TXE
R10	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R11	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R12	1-218-944-11	s	RESISTOR,CHIP 180 1/16W
R13	1-218-958-11	s	RESISTOR,CHIP 2.7K 1/16W(1005)
R14	1-218-944-11	s	RESISTOR,CHIP 180 1/16W
R15	1-218-954-11	s	RESISTOR, CHIP 1.2K 1/16W
R16	1-218-951-11	s	RESISTOR, CHIP 680 1/16
R17	1-218-948-11	s	RESISTOR CHIP 390 1/16W (1005)
R18	1-218-941-81	s	C-RES,V 100-1/16W J
R19	1-218-946-11	s	RESISTOR,CHIP 270 1/16W
R20	1-218-941-81	s	C-RES,V 100-1/16W J
R21	1-218-950-11	s	RESISTOR,CHIP 560,1/16W
R22	1-218-941-81	s	C-RES,V 100-1/16W J
R23	1-218-941-81	s	C-RES,V 100-1/16W J
R24	1-218-961-11	s	RESISTOR, CHIP 4.7K 1/16W
R25	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R26	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R27	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
S10	1-771-105-11	s	SWITCH, TACTILE
S11	1-771-105-11	s	SWITCH, TACTILE
S12	1-771-105-11	s	SWITCH, TACTILE
S13	1-771-105-11	s	SWITCH, TACTILE
S14	1-786-651-11	s	TACTILE SWITCH
S15	1-771-105-11	s	SWITCH, TACTILE

L BOARD

Ref. No. or Q'ty	Part No.	SP	Description
CN70	1-778-506-21	s	PIN, CONNECTOR 2P
D70	8-719-084-01	s	DIODE (LED) NSCW215T

NR BOARD

Ref. No. or Q'ty	Part No.	SP	Description
C80	1-117-370-11	s	CAPACITOR CERAMIC 10MF (3216)
CN80	1-770-620-21	s	PIN, CONNECTOR 3P
IC80	8-749-012-17	s	IC RS-140-T
R80	1-218-937-11	s	RESISTOR, CHIP 47
R81	1-218-981-11	s	RESISTOR CHIP 220K 1/16W(1005)

Q BOARD

Ref. No. or Q'ty	Part No.	SP	Description
C1	1-128-399-11	s	CAPACITOR ELECT 330MF/16V(CHIP
C2	1-128-399-11	s	CAPACITOR ELECT 330MF/16V(CHIP
C3	1-128-399-11	s	CAPACITOR ELECT 330MF/16V(CHIP
CN1	1-770-626-21	s	PIN, CONNECTOR (L TYPE) 9P
CN2	1-784-828-11	s	CONNECTOR, D SUB
R1	1-218-937-11	s	RESISTOR, CHIP 47
R2	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R3	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R4	1-218-937-11	s	RESISTOR, CHIP 47
R5	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R6	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R7	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R8	1-218-943-11	s	RESISTOR,CHIP 150 1/16W
R9	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R10	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)
R11	1-218-973-11	s	RESISTOR,CHIP 47K 1/16W (1005)

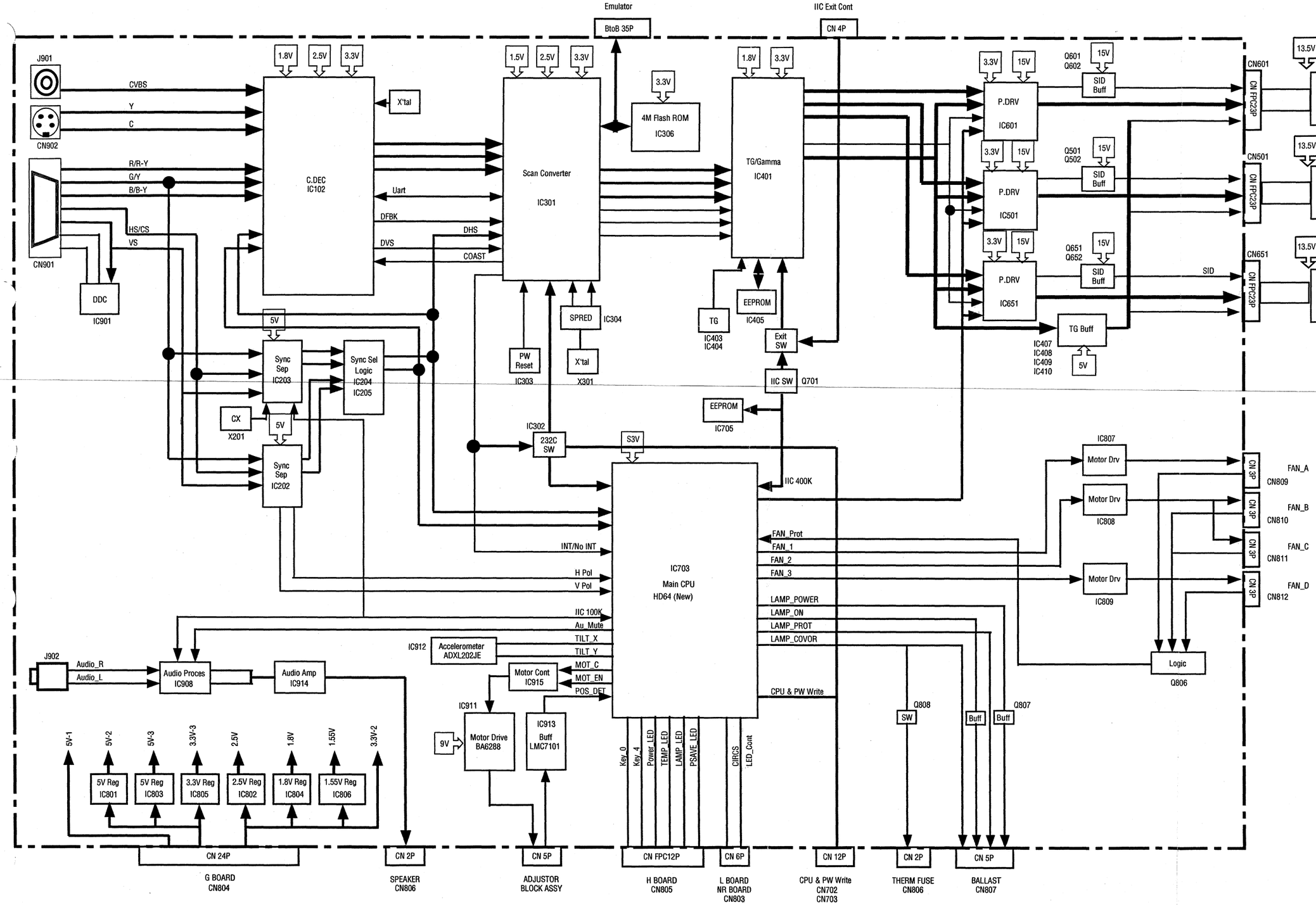
V BOARD

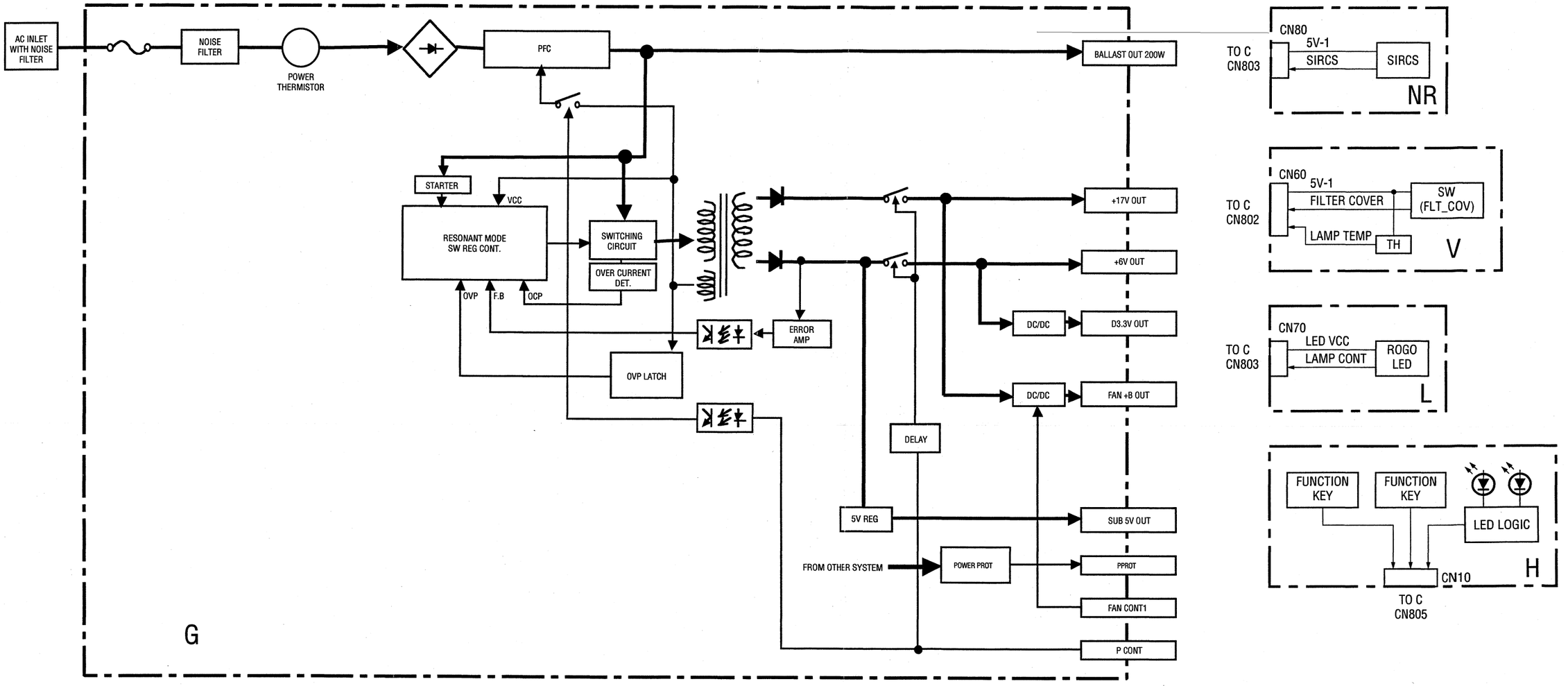
Ref. No. or Q'ty	Part No.	SP	Description
C60	1-164-943-11	s	CAPACITOR,CHIP CERAMIC 0.01MF
CN60	1-770-621-21	s	PIN, CONNECTOR 4P
R60	1-208-699-11	s	RESISTOR,CHIP 4.7K 1/16W(1005)
S60	⚠ 1-762-984-11	s	SWITCH, PUSH
TH60	1-803-382-11	s	THERMISTOR (10K)

SUPPLIED ACCESSORIES

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-476-555-21	s	REMOTE COMMANDER (RM-PJ2)
1pc	9-885-010-99	s	COVER, BATTERY (FOR RM-PJ2)
1pc	⚠ ————	s	POWER CORD (See Warning on Power Connection)
1pc	1-791-992-31	s	CABLE ASSY(15PDSUBCONNECTORX2)
1pc	4-098-859-01	s	OPERATING INSTRUCTION (JAPANESE,SIMPLIFIED CHINESE)
1pc	4-098-859-11	s	OPERATING INSTRUCTION (ENGLISH,FRENCH,SPANISH)
1pc	4-098-859-21	s	OPERATING INSTRUCTION (GERMAN,ITALIAN)
1pc	4-098-859-31	s	OPERATING INSTRUCTION (SIMPLIFIED CHINESE)
1pc	4-099-113-01	s	FILTER (E1)

Section 5
Block Diagrams




AC INLET WITH NOISE FILTER
NOISE FILTER
POWER THERMISTOR
PFC
BALLAST OUT 200W
STARTER
VCC
RESONANT MODE SW REG CONT.
SWITCHING CIRCUIT
OVER CURRENT DET.
OVP
F.B
OCP
ERROR AMP
OVP LATCH
+17V OUT
+6V OUT
DC/DC
D3.3V OUT
DC/DC
FAN +B OUT
DELAY
5V REG
SUB 5V OUT
FROM OTHER SYSTEM
POWER PROT
PPROT
FAN CONT1
P CONT
G
CN80
5V-1
SIRCS
SIRCS
TO C CN803
NR
CN60
5V-1
FILTER COVER
SW (FLT_COV)
LAMP TEMP
TH
TO C CN802
V
CN70
LED VCC
LAMP CONT
ROGO LED
TO C CN803
L
FUNCTION KEY
FUNCTION KEY
LED LOGIC
CN10
TO C CN805
H

Section 6
Diagrams

Note:

- Parts marked " * " differ according to the model/destination. Refer to the mount table for each function.
- The parts marked " # " on schematic diagrams are not mounted.
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics.
- All electrolytics are in 50 V unless otherwise specified.
- : fusible resistor
- : nonflammable resistor
- Δ : internal component
- : panel designation and adjustment for repair
- Caution when replacing chip parts
  New parts must be attached after removal of the chip.
  Be careful not to heat the minus side of a tantalum capacitor, because it is easily damaged by the heat.

Reference information

RESISTOR	RN	: METAL FILM
	RC	: SOLID
	FPRD	: NONFLAMMABLE CARBON
	FUSE	: NONFLAMMABLE FUSIBLE
	RS	: NONFLAMMABLE METAL OXIDE
	RB	: NONFLAMMABLE CEMENT
	RW	: NONFLAMMABLE WIREWOUND
	※	: ADJUSTMENT RESISTOR
COIL	LF-8L	: MICRO INDUCTOR
CAPACITOR	TA	: TANTALUM
	PS	: STYROL
	PP	: POLYPROPYLENE
	PT	: MYLAR
	MPS	: METALIZED POLYESTER
	MPP	: METALIZED POLYPROPYLENE
	ALB	: BIPOLAR
	ALT	: HIGH TEMPERATURE
	ALR	: HIGH RIPPLE

[Measuring conditions, voltage and waveform]

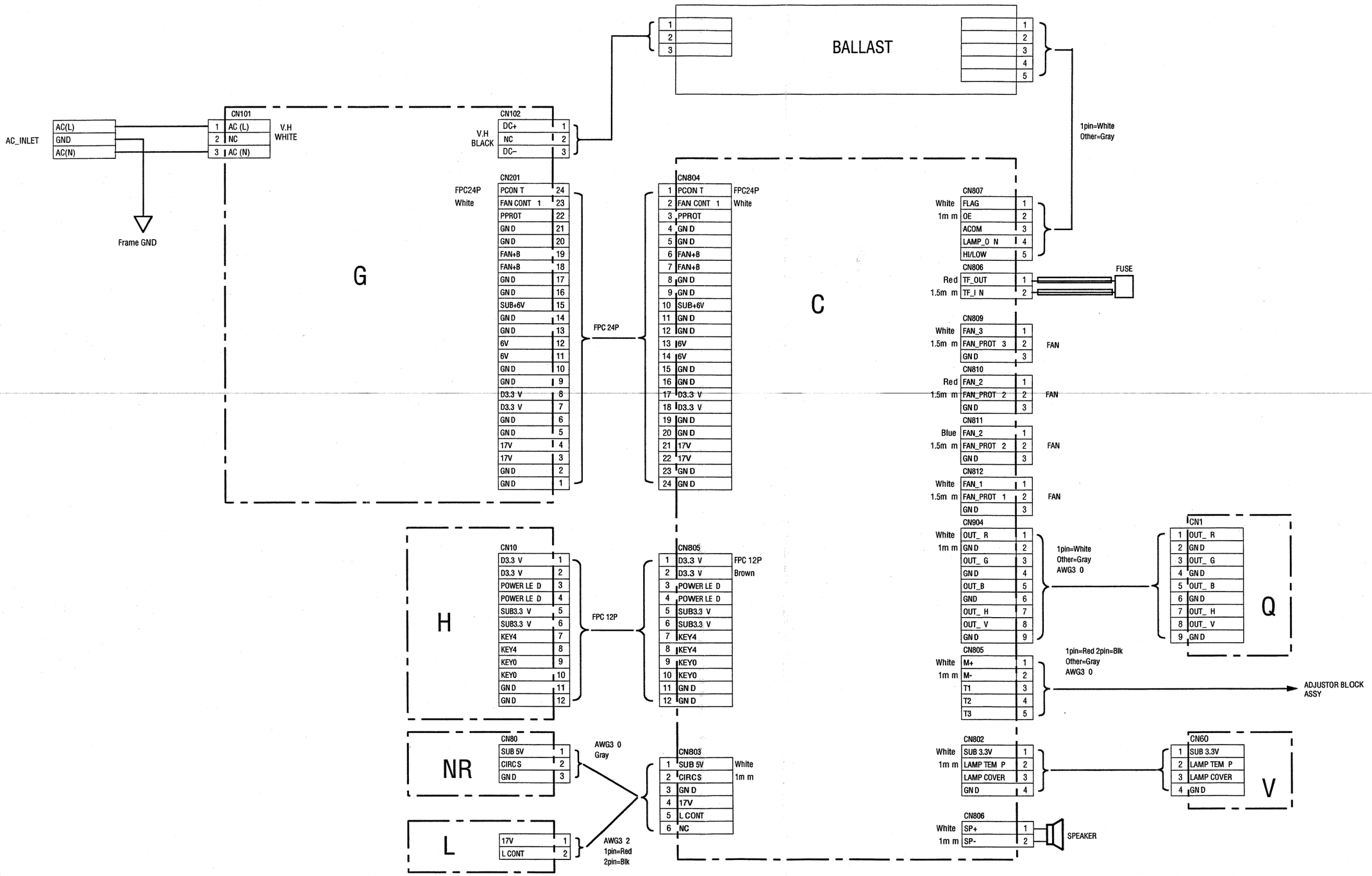
- A voltage value is the reference value between the measurement point and the earth, when the RGB Color bar signal is received from the color bar generator. (digital multi-meter used: 10 M ohms/V DC)
- Unit of voltage is V (volt).
  (Voltage variations may occur due to normal production tolerances.)
- : B+line
- : B– line
- No mark : NTSC (3.58 MHz) color bar signal.
- : Signal path.

The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.

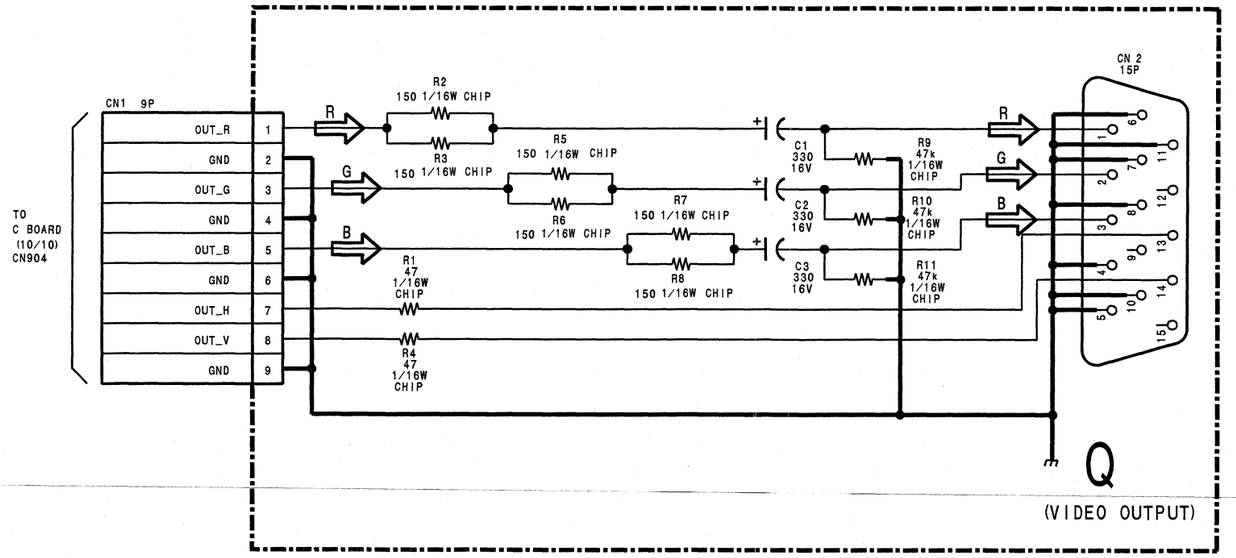
Les composants identifiés par la marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

6-1

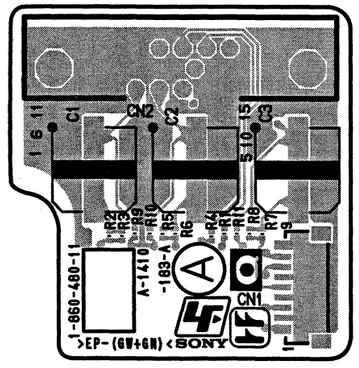
6-1. Frame Wiring



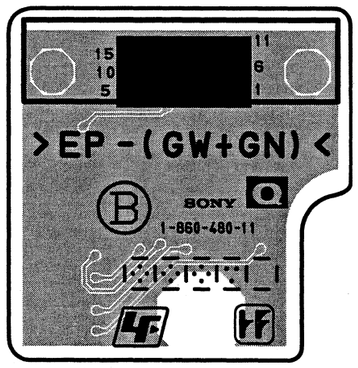
6-2. Schematic Diagrams and Board Layouts



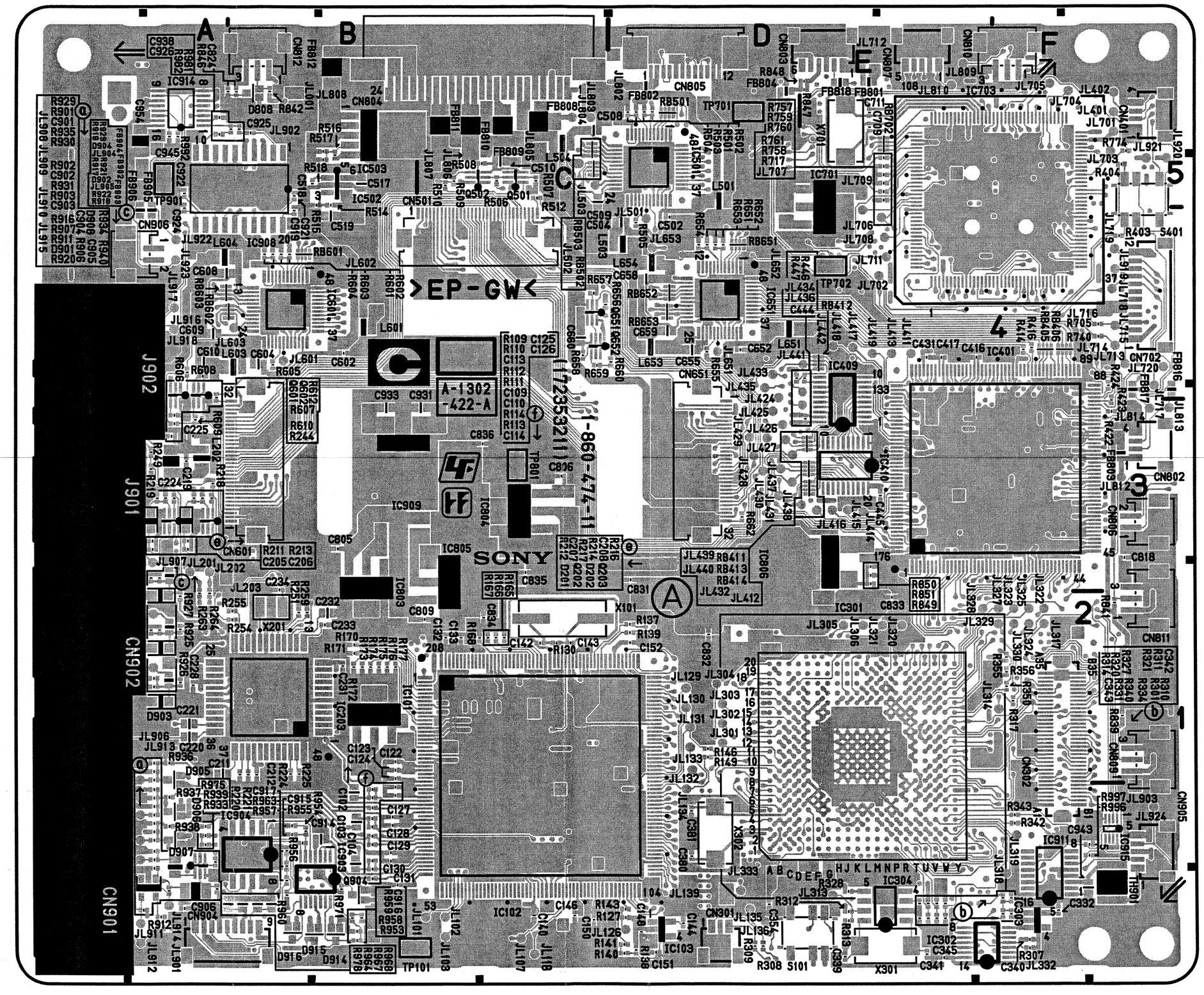
B-SS1751-Q



Q -A SIDE-
SUFFIX: -11

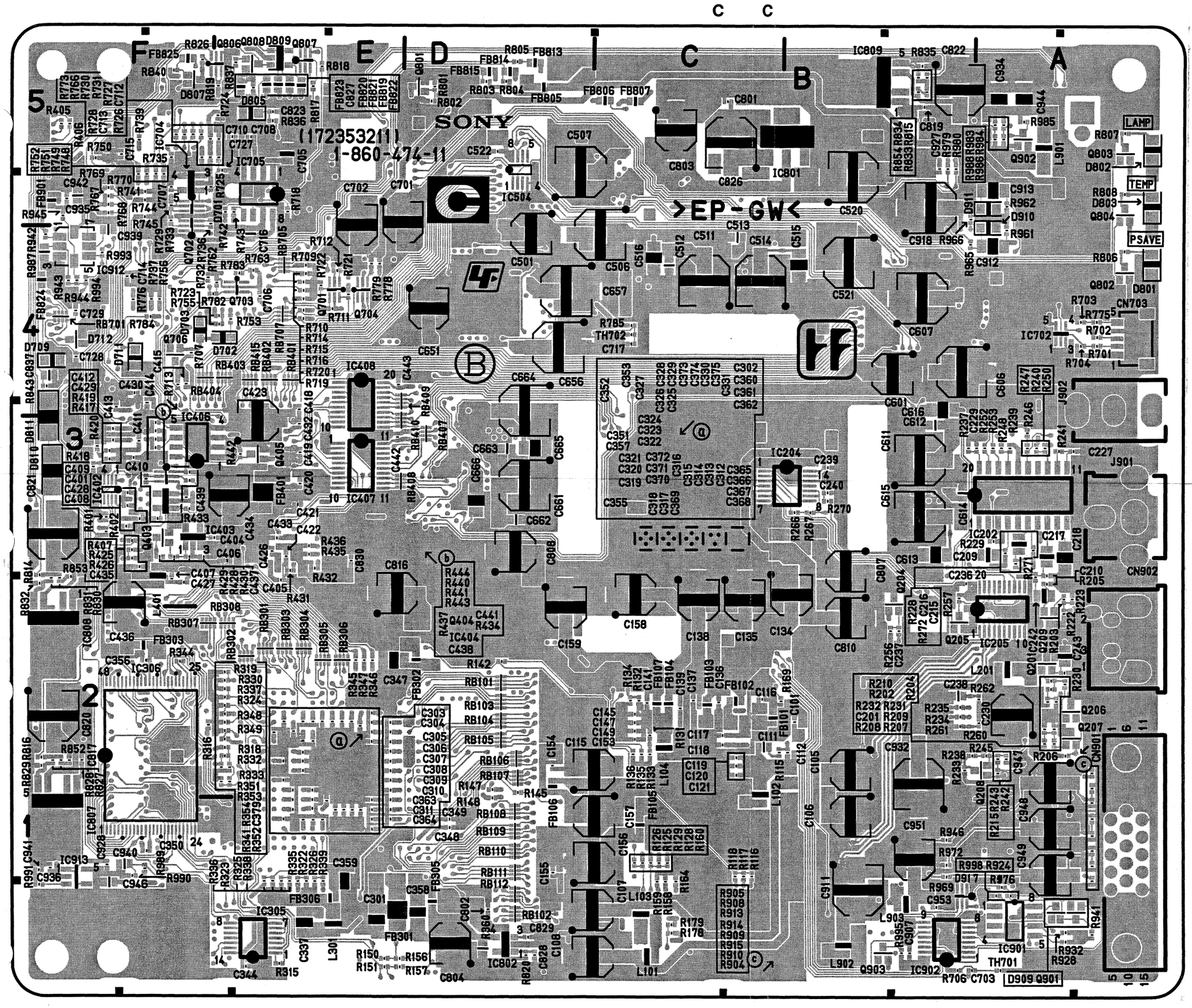


Q -B SIDE-
SUFFIX: -11



C -A SIDE-
SUFFIX: -11

VPL-ES1



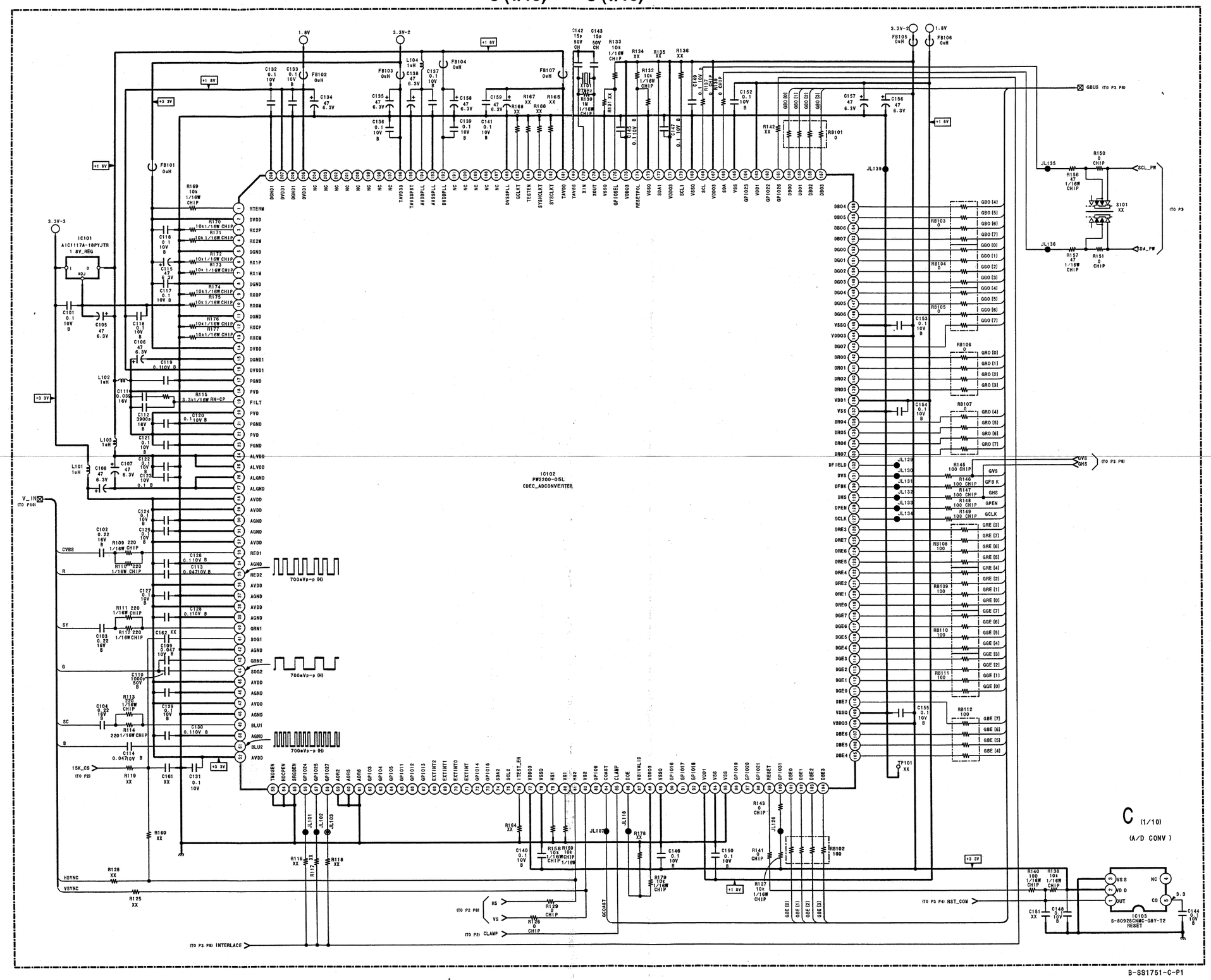
C BOARD

*:B SIDE

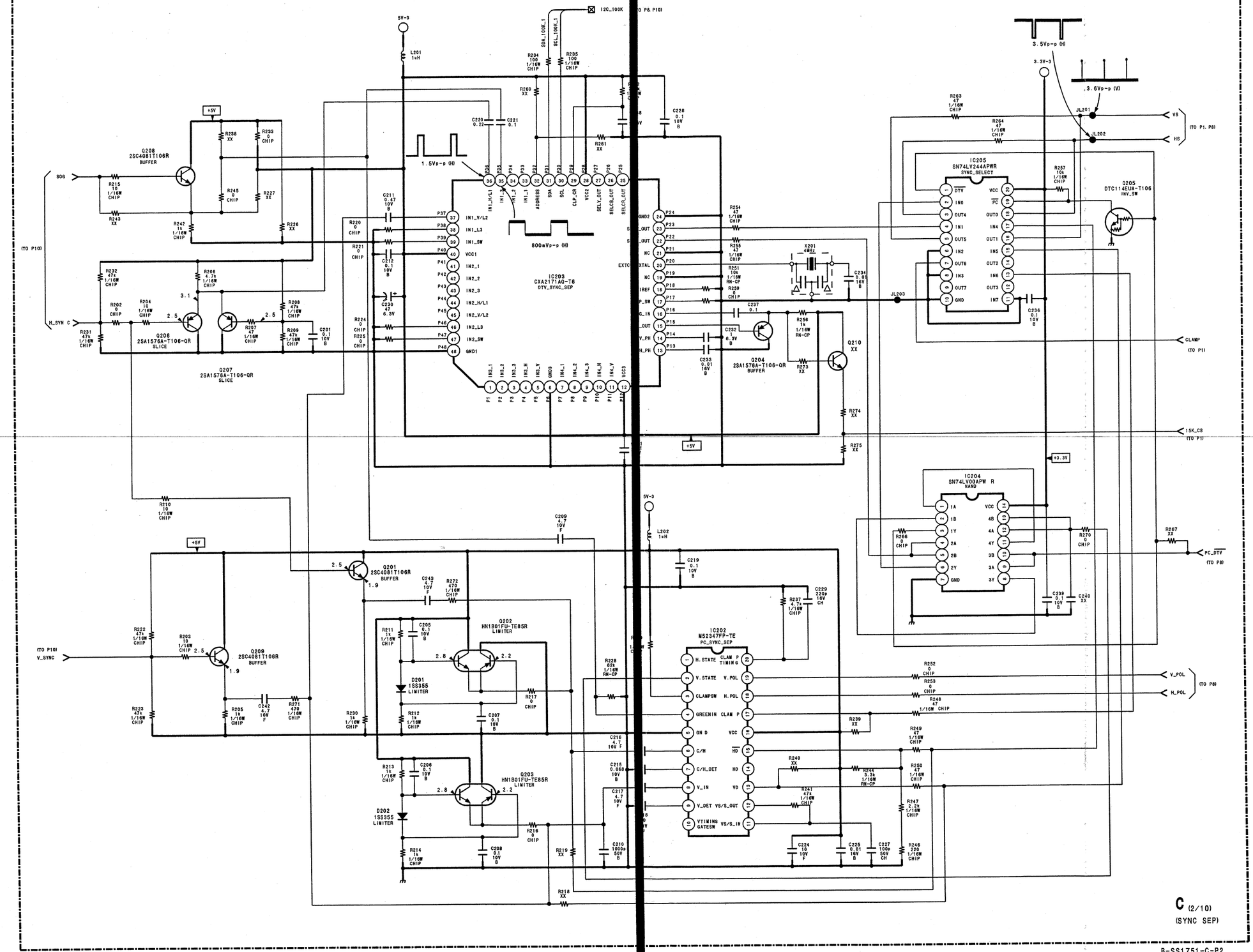
D201		C-3
D202		C-3
D701	*	E-5
D702	*	E-4
D703	*	F-4
D709	*	F-4
D711	*	F-4
D712	*	F-4
D801	*	A-5
D802	*	A-5
D803	*	A-5
D805	*	E-5
D807	*	F-5
D808		B-5
D809	*	E-5
D810	*	F-3
D811	*	F-3
D901		A-4
D902		A-5
D903		A-2
D904		A-5
D905		A-2
D906		A-1
D907		A-1
D908		A-4
D909	*	A-1
D910	*	A-5
D911	*	B-5
D914		B-1
D915		B-1
D916		B-1
D917	*	A-1
IC101		B-2
IC102		C-1
IC103		D-1
IC202	*	A-3
IC203		B-2
IC204	*	B-3
IC205	*	A-2
IC301		E-2
IC302		E-1
IC303		F-1
IC304		F-1
IC305	*	E-1
IC306	*	F-2
IC401		F-4
IC402	*	F-3
IC403	*	E-3
IC404	*	D-2
IC406	*	F-3
IC407	*	E-3
IC408	*	E-4
IC409		E-4
IC410		E-3
IC501		D-5
IC502		B-5
IC503		B-5
IC504	*	D-5
IC601		B-4
IC651		D-4
IC701		E-5
IC702	*	A-4
IC703		E-5
IC704	*	F-5
IC705	*	E-5
IC801	*	B-5
IC802	*	D-1
IC803		B-2
IC804		C-3
IC805		C-3
IC806		D-3
IC807	*	F-1
IC808	*	F-2
IC809	*	B-5
IC901	*	A-1
IC902	*	B-1
IC903		B-1
IC904		B-1
IC908		B-4
IC909		B-3
IC911		F-1
IC912	*	F-4
IC913	*	F-1
IC914		A-5
IC915		F-1
Q201	*	A-2
Q202		C-3
Q203		C-3
Q204	*	B-3
Q205	*	B-2
Q206	*	A-2
Q207	*	A-2
Q208	*	A-2
Q209	*	A-2
Q403	*	F-3
Q404	*	D-2
Q405	*	E-3
Q501		C-5
Q502		C-5
Q601		B-4
Q602		B-4
Q651		D-4
Q652		D-4
Q701	*	E-4
Q702	*	F-4
Q703	*	E-4
Q704	*	E-4
Q706	*	F-4
Q801	*	D-5
Q802	*	A-4
Q803	*	A-5
Q804	*	A-5
Q806	*	E-5
Q807	*	E-5
Q808	*	E-5
Q901	*	A-1
Q902	*	A-5
Q903	*	B-1
Q904		B-1
TP101		B-1
TP701		D-5
TP702		E-4
TP801		C-3
TP901		A-5

C -B SIDE-

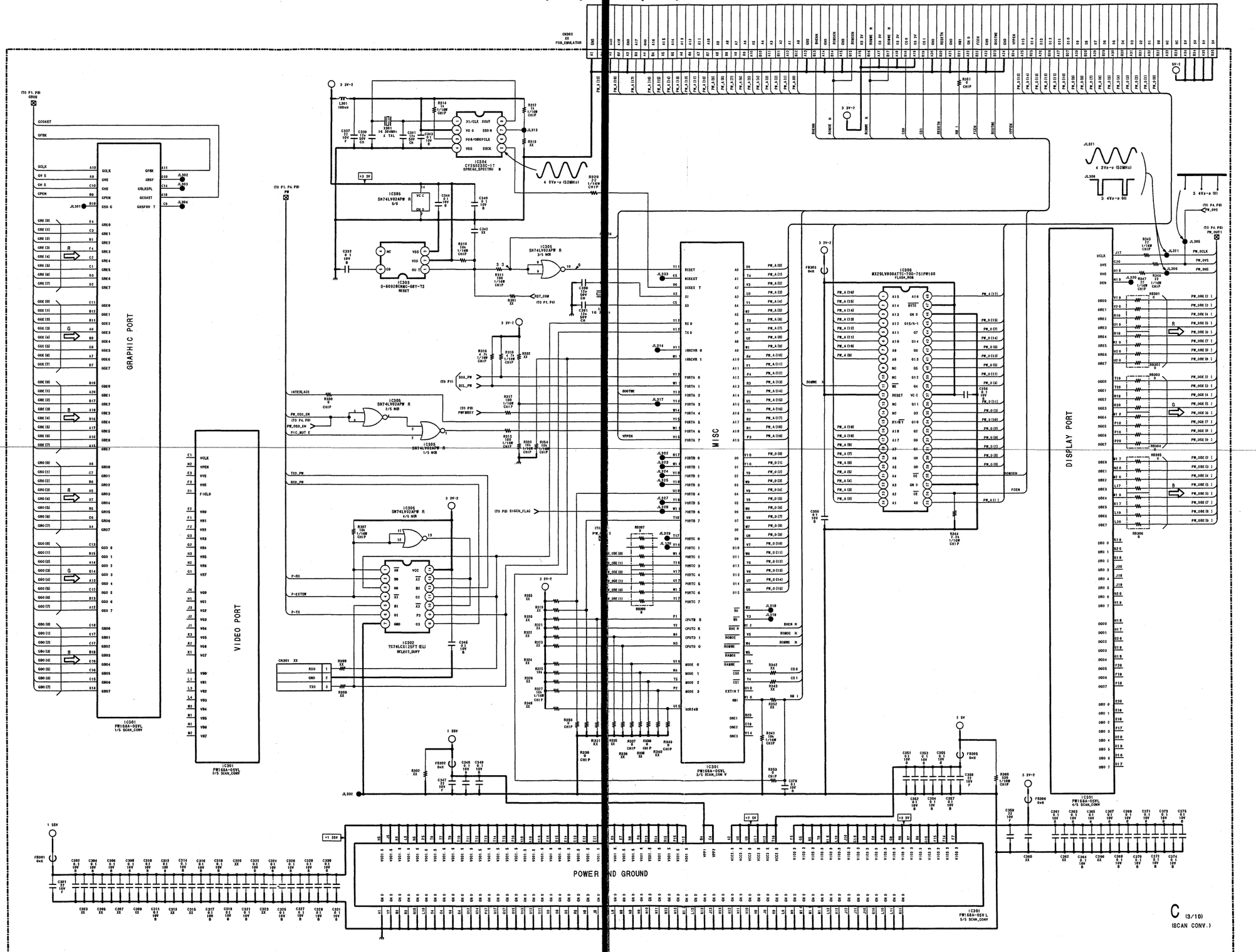
SUFFIX: -11

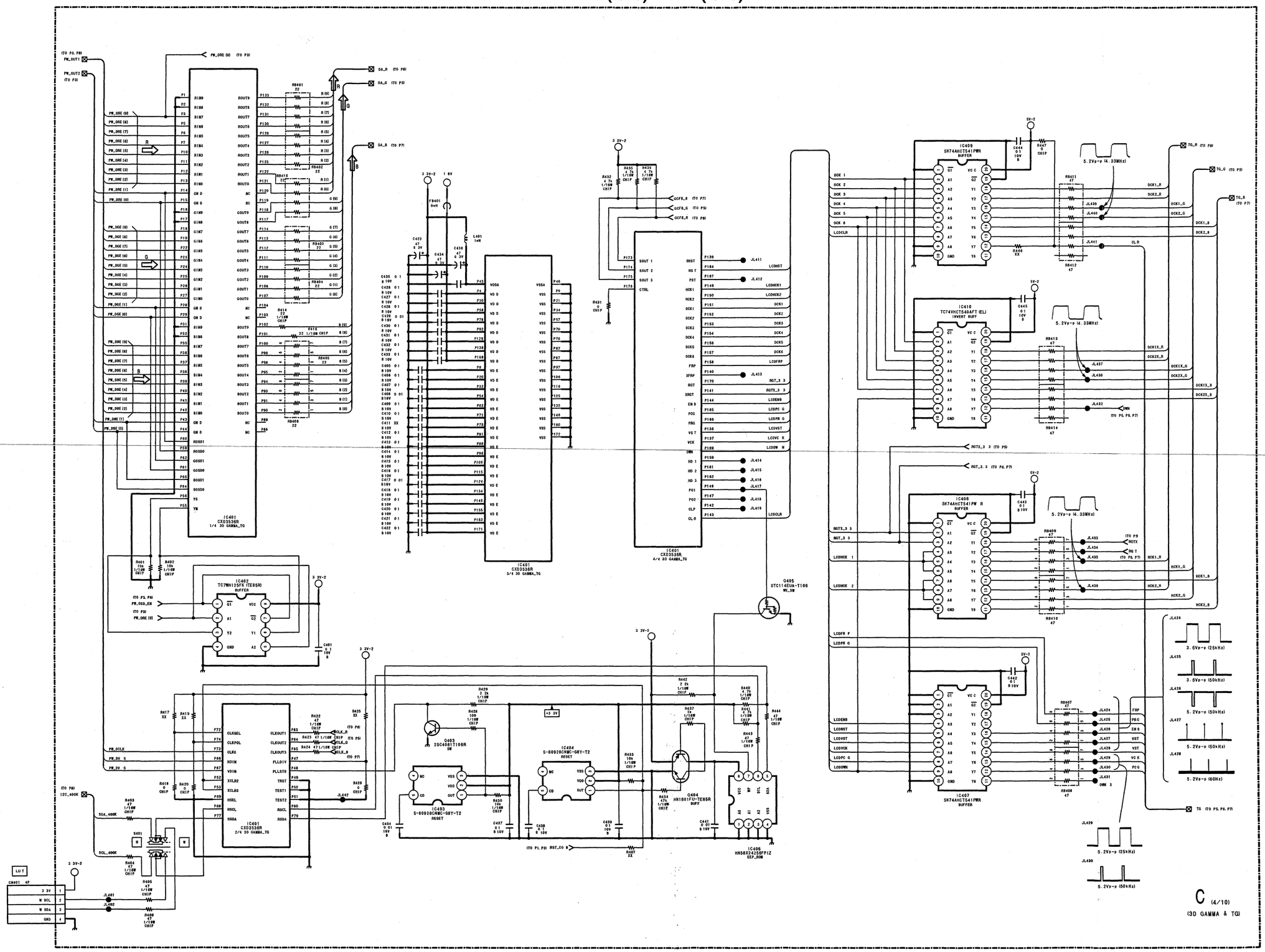

IC102
PW2200-05L
CDEC_ADCONVERTER
IC101
A1C1117A-18PYJTR
1.8V_REG
IC1103
S-80928CNMC-G8Y-T2
RESET
C (1/10)
(A/D CONV)
B-SS1751-C-P1

C (2/10)


5V-3
L201 1uH
I2C_100K
(TO P8, P10)
SDA_100K_I
SCL_100K_I
R234 100 1/16W CHIP
R235 100 1/16W CHIP
R260 XX
C220 0.22
C221 0.1
C228 0.1 10V B
R261 XX
+5V
Q208 2SC4081T106R BUFFER
R238 XX
R233 0 CHIP
R245 0 CHIP
R227 XX
R226 XX
R242 1k 1/16W CHIP
R243 XX
R215 10 1/16W CHIP
SOG
(TO P10)
H_SYN C
1.5Vp-p (H)
800mVp-p (H)
IC203 CXA2171AQ-T6 DTV_SYNC_SEP
C211 0.47 10V B
C212 0.1 10V B
C230 47 6.3V
C201 0.1 10V B
R220 0 CHIP
R221 0 CHIP
R224 0 CHIP
R225 0 CHIP
R231 47k 1/16W CHIP
R232 47k 1/16W CHIP
R202 0 CHIP
R206 5.7k 1/16W CHIP
R204 10 1/16W CHIP
R208 47k 1/16W CHIP
R209 47k 1/16W CHIP
R207 47 1/16W CHIP
Q206 2SA1576A-T106-QR SLICE
Q207 2SA1576A-T106-QR SLICE
3.1
2.5
2.5
R254 47 1/16W CHIP
R255 47 1/16W CHIP
R251 10k 1/16W RN-CP
R259 0 CHIP
X201 4MHz
C234 0.01 16V B
C237 0.1
C232 3 6.3V B
C233 0.01 16V B
R256 1k 1/16W RN-CP
R273 XX
Q204 2SA1576A-T106-QR BUFFER
Q210 XX
R274 XX
R275 XX
JL203
3.5Vp-p (H)
3.3V-3
3.6Vp-p (V)
JL201
JL202
R263 47 1/16W CHIP
R264 47 1/16W CHIP
VS
HS
(TO P1, P8)
IC205 SN74LV244APWR SYNC_SELECT
R257 10k 1/16W CHIP
Q205 DTC114EUA-T106 INV_SW
C236 0.1 10V B
CLAMP (TO P11)
15K_CS (TO P11)
+3.3V
IC204 SN74LV00APW R NAND
R266 0 CHIP
R270 0 CHIP
R267 XX
PC_DTV (TO P8)
C239 0.1 10V B
C240 XX
R210 10 1/16W CHIP
5V-3
L202 1uH
C209 4.7 10V F
C219 0.1 10V B
+5V
Q201 2SC4081T106R BUFFER
2.5
1.9
C243 4.7 10V F
R272 470 1/16W CHIP
R237 4.7k 1/16W CHIP
C229 220p 16V CH
R222 47k 1/16W CHIP
R203 10 1/16W CHIP
2.5
1.9
(TO P10) V_SYNC
R223 47k 1/16W CHIP
R205 1k 1/16W CHIP
C242 4.7 10V F
R271 470 1/16W CHIP
Q209 2SC4081T106R BUFFER
R211 1k 1/16W CHIP
C295 0.1 10V B
Q202 HN1B01FU-TE85R LIMITER
2.8
2.2
D201 1SS355 LIMITER
R217 0 CHIP
R212 1k 1/16W CHIP
C207 0.1 10V B
R230 1k 1/16W CHIP
R213 1k 1/16W CHIP
C206 0.1 10V B
Q203 HN1B01FU-TE85R LIMITER
2.8
2.2
D202 1SS355 LIMITER
R216 3 CHIP
R214 1k 1/16W CHIP
C208 0.1 10V B
R219 XX
C210 1000p 50V B
R218 XX
IC202 M52347FP-TE PC_SYNC_SEP
R228 82k 1/16W RN-CP
C216 4.7 10V F
C215 0.068 10V B
C217 4.7 10V F
C210 1000p 50V B
R252 0 CHIP
R253 0 CHIP
R248 47 1/16W CHIP
V_POL
H_POL
(TO P8)
R239 XX
R249 47 1/16W CHIP
R240 XX
R244 3.3k 1/16W RN-CP
R250 47 1/16W CHIP
R241 47k 1/16W CHIP
R247 2.2k 1/16W CHIP
C224 10 10V F
C225 0.01 16V B
C227 100p 50V CH
R246 220 1/16W CHIP
C (2/10)
(SYNC SEP)
B-SS1751-C-P2

C (3/10)


GRAPHIC PORT
VIDEO PORT
MISC
DISPLAY PORT
POWER AND GROUND
IC301 PM168A-05VL 1/S SCAN_CONV
IC301 PM168A-05VL 2/S SCAN_CONV
IC301 PM168A-05VL 3/S SCAN_CONV V
IC301 PM168A-05VL 4/S SCAN_CONV
IC301 PM168A-05V L 5/S SCAN_CONV
IC302 TC74LCX125FT (EL) SELECT_BUFF
IC303 S-80928CNMC-GBY-T2 RESET
IC304 CY25025SC-1T SPREAD_SPECTRU M
IC305 SN74LV02APW R 1/S NOR
IC305 SN74LV02APW R 2/S NOR
IC305 SN74LV02APW R 3/S NOR
IC305 SN74LV02APW R 4/S NOR
IC306 MX29LV800ATTC-70G-751PW100 FLASH_ROM
(ISCAN CONV.)
B-SS1751-C-P3


IC401 CXD3536R 1/4 3D GAMMA_TG
IC401 CXD3536R 2/4 3D GAMMA_TG
IC401 CXD3536R 3/4 3D GAMMA_TG
IC401 CXD3536R 4/4 3D GAMMA_TG
IC402 TC7MH125FK (TE85R) BUFFER
IC403 S-80928CNMC-G8Y-T2 RESET
IC404 S-80928CNMC-G8Y-T2 RESET
IC406 HN58X2405BFPIZ EEP_ROM
IC407 SN74AHCT541PWR BUFFER
IC408 SN74AHCT541PW R BUFFER
IC409 SN74AHCT541PWR BUFFER
IC410 TC74VHCT540AFT (EL) INVERT BUFF
Q403 2SC4081T106R DB
Q404 HN1B01FU-TE85R BUFF
Q405 DTC114EUA-T106 ME_SW
5.2Vp-p (4.33MHz)
3.6Vp-p (25kHz)
3.5Vp-p (50kHz)
5.2Vp-p (50Hz)
5.2Vp-p (60Hz)
5.2Vp-p (125kHz)
C (4/10)
(3D GAMMA & TG)

B-SS1751-C-P4

C (5/10)

3.3V-2
L501 1uH
C501 47 5.3V
C502 0.1 10V B
(TO P4) RGTX_3.3
R505 10k 1/16W CHIP
C504 0.1 25V F
C506 47 25V
L503 1uH
L504 1uH
C507 47 25V
C508 0.1 25V F
15.5V
+15.5V
R508 2.2k 1/16W CHIP
R509 10 1/16W CHIP
Q502 HN1B01FU-TE85R BUFFER
Q501 HN1B01FU-TE85R BUFFER
R507 2.2k 1/16W CHIP
R510 10 1/16W CHIP
10Vp-p (25kHz)
(TO P4) MCLK_G
(TO P4) DA_G
+3.3V
JL501
FRP
PRG
P36 P35 P34 P33 P32 P31 P30 P29 P28 P27 P26 P25
DGND VDD CLK FRP PRG DIRC STATUS FRINV AGND AGND AGND VCC
4Vp-p (52.6MHz)
IC501 CXA7004 LCD_DRIVER(G)
C510 0.1 25V F
R506 100 1/16W CHIP
1Vp-p (25kHz)
JL503
VID_G [1]
VID_G [2]
VID_G [3]
VID_G [4]
VID_G [5]
VID_G [6]
RB502 22
RB503 22
VCOM_OUT_G
C509 0.1 25V F
JL502
RB501 22
R502 10k 1/16W CHIP
R501 XX
R503 10k 1/16W CHIP
R504 10k 1/16W CHIP
SENB
SCLK
SDAT
(TO P4, P6, P7) DWN
(TO P4) TG_G
TG
(TO P4, P6, P7)
3.3V-2
IC504 TC7WH34FU (TE12R) BUS BUFF
(TO P8)
PDRV_SCLK
PDRV_SEN
PDRV_SDA
SENB
SDAT
SCLK
C522 0.1 10V B
3LINESBUS
(TO P6, P7)
17V
IC503 PQ20WZ1U 15.5V REG
+17V
R517 4.7k 1/16W RN-CP
R518 XX
R516 1k 1/16W RN-CP
C520 47 25V
IC502 TK11900MTL 13.5V REG
C518 0.01 16V B
+13.5V
C517 0.1 25V F
R515 12k 1/16W CHIP
R514 120k 1/16W RN-CP
C521 47 25V
C519 0.1 25V F
C513 0.1 25V F
13.5V
DCK1_G
DCK1X_G
DCK2X_G
DCK2_G
HCK2_G
HCK1_G
(TO P4) RGTX
HST
C514 47 25V
C516 1 25V B
C515 1 25V B
EN B
VCK
VST
CLR
PCG
(TO P4) GCFB_G
R512 47 1/16W CHIP
C511 47 25V
C512 0.1 25V F

CN501 32P

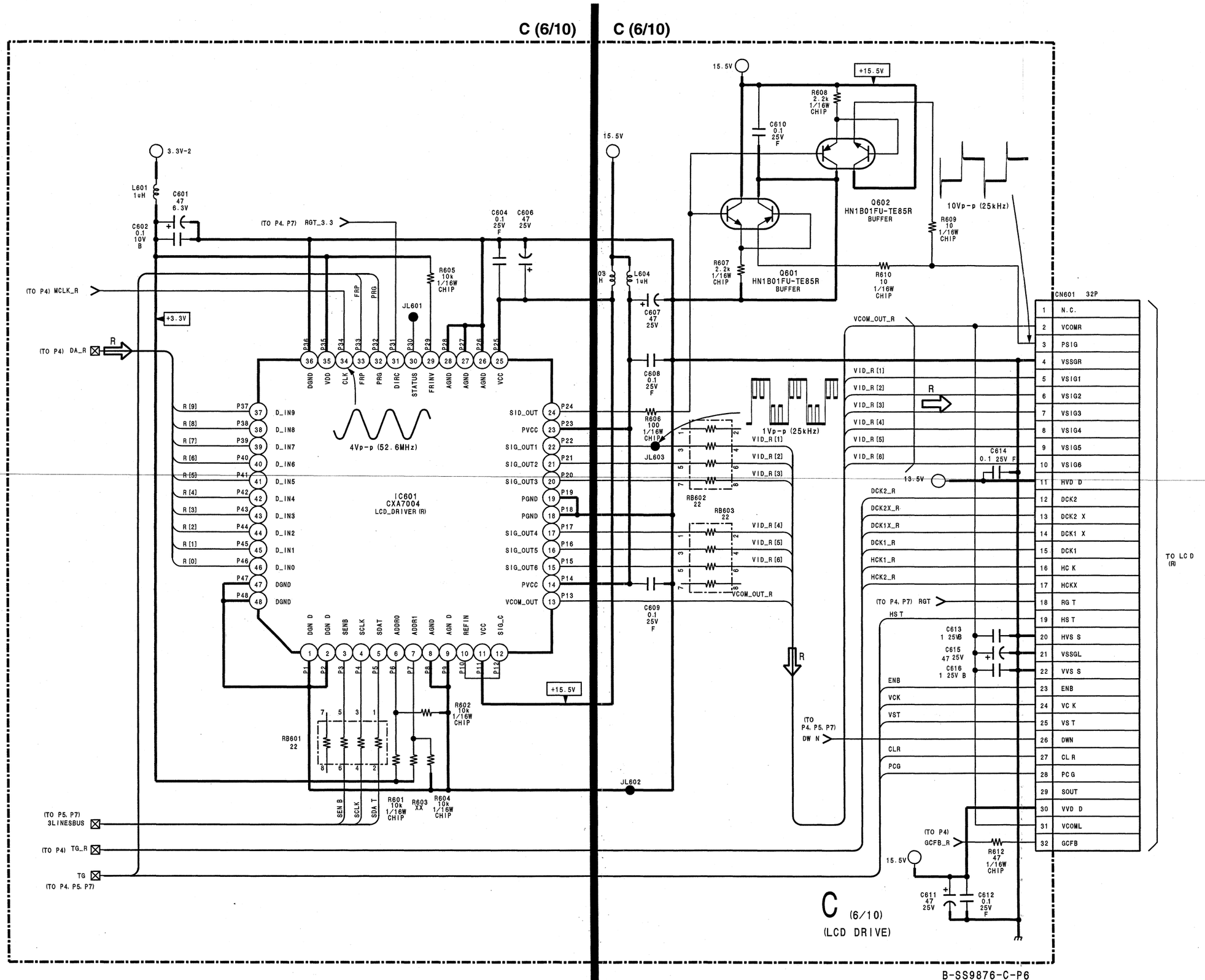
1	N C
2	VCOMR
3	PSIG
4	VSSGR
5	VSIG1
6	VSIG2
7	VSIG3
8	VSIG4
9	VSIG5
10	VSIG6
11	HVDD
12	DCK2
13	DCK2 X
14	DCK1 X
15	DCK1
16	HC K
17	HCKX
18	RGT
19	HS T
20	HVSS
21	VSSGL
22	VVSS
23	EN B
24	VC K
25	VS T
26	DWN
27	CL R
28	PCG
29	SOUT
30	VVDD
31	VCOML
32	GCFB

TO LCD (G)

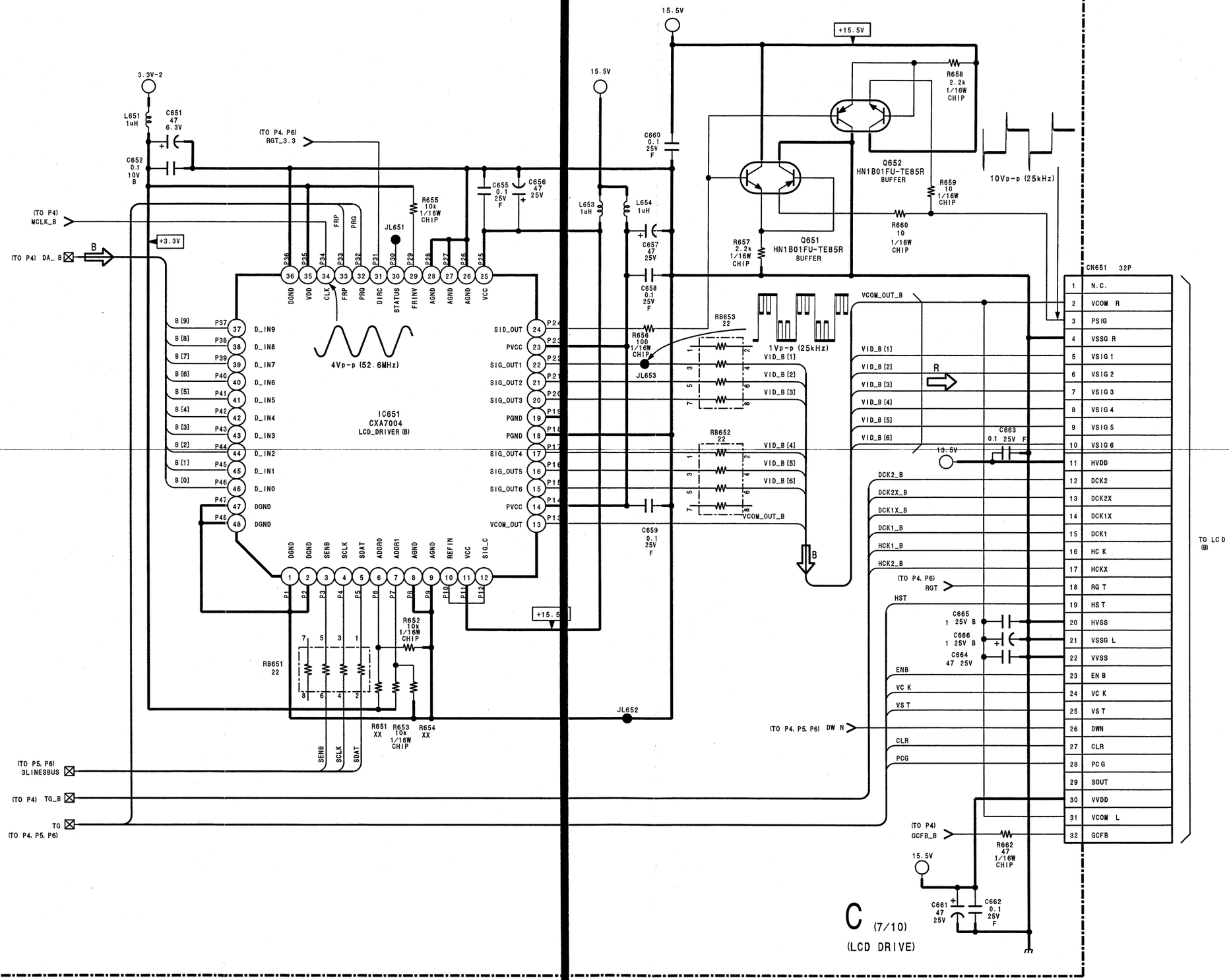
C (5/10) (LCD DRIVE)

B-SS1751-C-P5

6-10


3.3V-2
L601 1uH
C601 47 6.3V
C602 0.1 10V B
(TO P4, P7) RGT_3.3
C604 0.1 25V F
C606 47 25V
R605 10k 1/16W CHIP
(TO P4) MCLK_R
+3.3V
(TO P4) DA_R
R
JL601
FRP
PRG
P36 P35 P34 P33 P32 P31 P30 P29 P28 P27 P26 P25
DGND VDD CLK FRP PRG DIRC STATUS FRINV AGND AGND AGND VCC
4Vp-p (52.6MHz)
IC601
CXA7004
LCD_DRIVER (R)
R [9] P37 37 D_IN9
R [8] P38 38 D_IN8
R [7] P39 39 D_IN7
R [6] P40 40 D_IN6
R [5] P41 41 D_IN5
R [4] P42 42 D_IN4
R [3] P43 43 D_IN3
R [2] P44 44 D_IN2
R [1] P45 45 D_IN1
R [0] P46 46 D_INO
P47 47 DGND
P48 48 DGND
SID_OUT 24 P24
PVCC 23 P23
SIG_OUT1 22 P22
SIG_OUT2 21 P21
SIG_OUT3 20 P20
PGND 19 P19
PGND 18 P18
SIG_OUT4 17 P17
SIG_OUT5 16 P16
SIG_OUT6 15 P15
PVCC 14 P14
VCOM_OUT 13 P13
DGN D DGN D SENB SCLK SDAT ADDR0 ADDR1 AGND AGN D REFIN VCC SIG_C
1 2 3 4 5 6 7 8 9 10 11 12
P1 P2 P3 P4 P5 P6 P7 P8 P9 P10 P11 P12
+15.5V
R602 10k 1/16W CHIP
RB601 22
JL602
SEN B SCLK SDA T
R601 10k 1/16W CHIP
R603 XX
R604 10k 1/16W CHIP
(TO P5, P7) 3LINESBUS
(TO P4) TG_R
TG
(TO P4, P5, P7)
15.5V
03 H
L604 1uH
C607 47 25V
C608 0.1 25V F
R606 100 1/16W CHIP
JL603
C609 0.1 25V F
C610 0.1 25V F
R608 2.2k 1/16W CHIP
Q602 HN1B01FU-TE85R BUFFER
10Vp-p (25kHz)
R609 10 1/16W CHIP
R607 2.2k 1/16W CHIP
Q601 HN1B01FU-TE85R BUFFER
R610 10 1/16W CHIP
1Vp-p (25kHz)
VID_R [1]
VID_R [2]
VID_R [3]
VID_R [4]
VID_R [5]
VID_R [6]
RB602 22
RB603 22
VCOM_OUT_R
R
VCOM_OUT_R
VID_R [1]
VID_R [2]
VID_R [3]
VID_R [4]
VID_R [5]
VID_R [6]
13.5V
C614 0.1 25V F
DCK2_R
DCK2X_R
DCK1X_R
DCK1_R
HCK1_R
HCK2_R
(TO P4, P7) RGT
HS T
C613 1 25VB
C615 47 25V
C616 1 25V B
ENB
VCK
VST
(TO P4, P5, P7) DW N
CLR
PCG
(TO P4) GCFB_R
15.5V
R612 47 1/16W CHIP
C611 47 25V
C612 0.1 25V F
CN601 32P
1 N.C.
2 VCOMR
3 PSIG
4 VSSGR
5 VSIG1
6 VSIG2
7 VSIG3
8 VSIG4
9 VSIG5
10 VSIG6
11 HVD D
12 DCK2
13 DCK2 X
14 DCK1 X
15 DCK1
16 HC K
17 HCKX
18 RG T
19 HS T
20 HVS S
21 VSSGL
22 VVS S
23 ENB
24 VC K
25 VS T
26 DWN
27 CL R
28 PC G
29 SOUT
30 VVD D
31 VCOML
32 GCFB
TO LC D (R)
C (6/10) (LCD DRIVE)
B-SS9876-C-P6

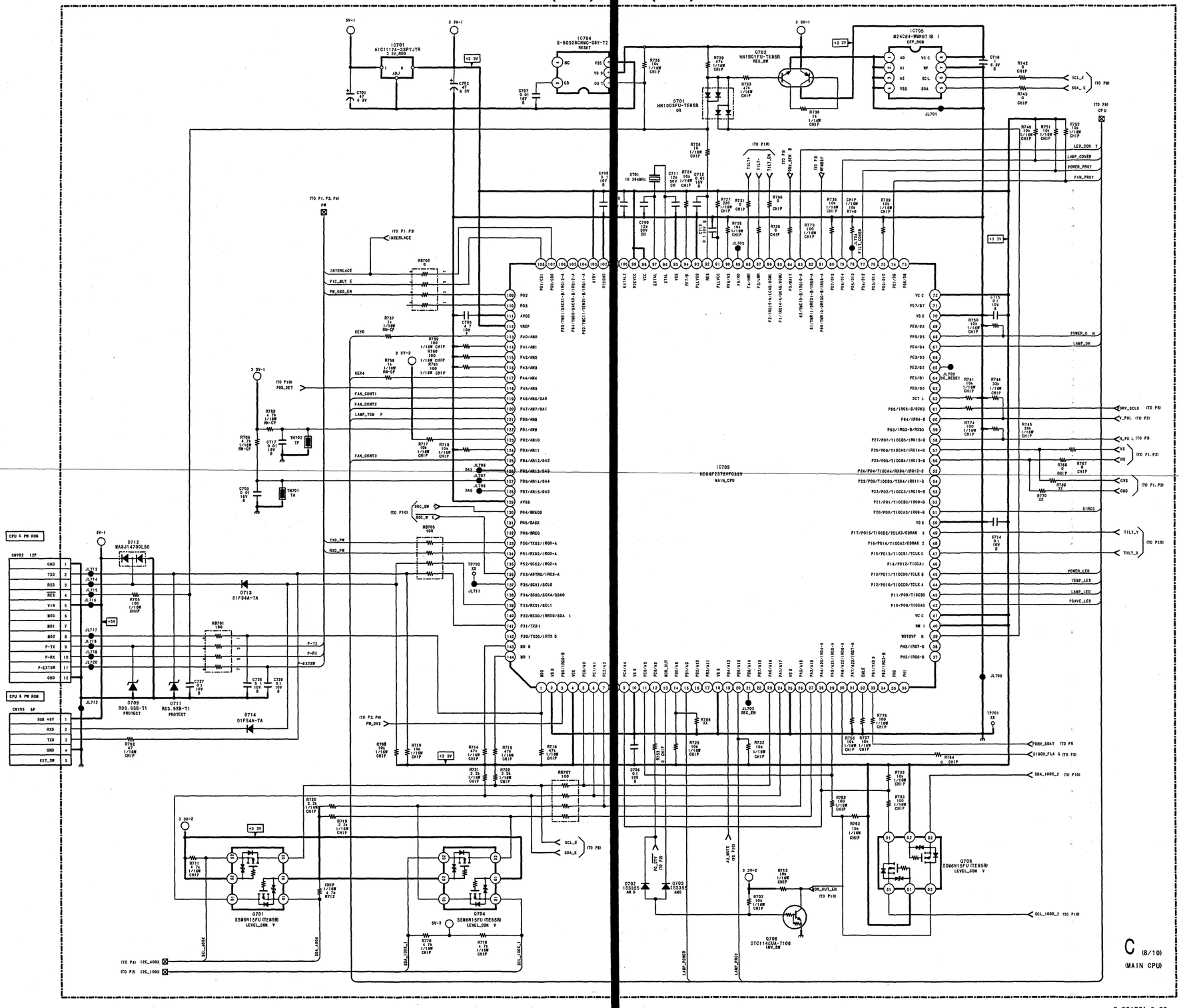
C (7/10)



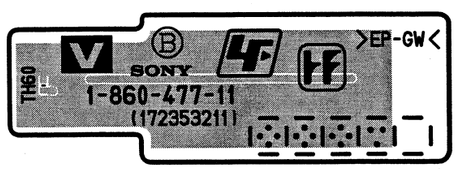
B-SS1751-C-P7

A | B | C | D | E | F | G | H

C (8/10)

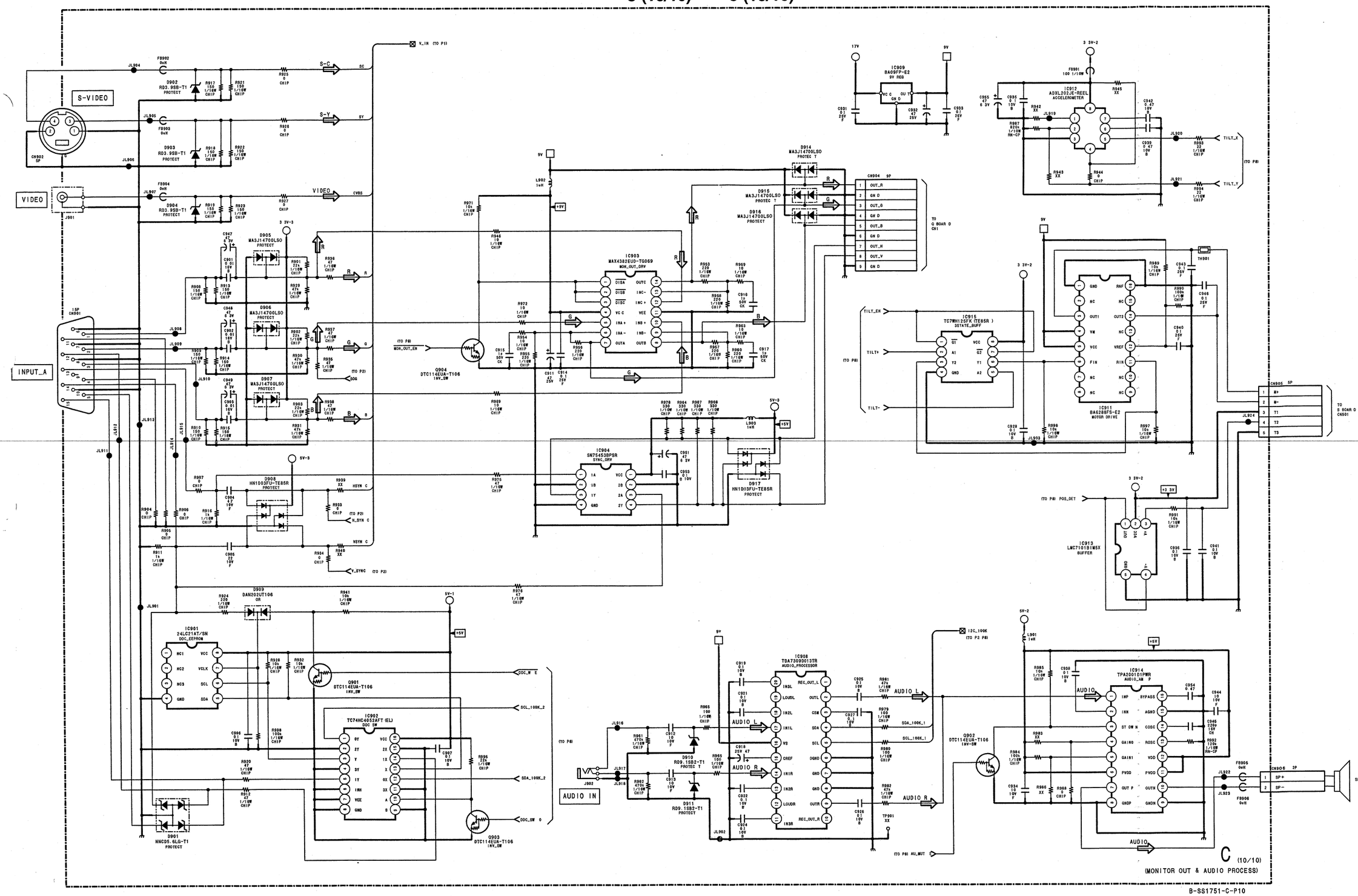

IC701 A1C11174-33PV JTR
IC704 S-80926CNMC-G8Y-T2 RESET
Q702 HN1B01FU-TE85R RED_SW
Q701 HN1D03FU-TE85R GR
IC705 M24C64-WMN6T (S) EEP_ROM
X701 16.384MHz
IC703 HD64F2378VFQ33V MAIN_CPU
D712 MA8J14700LS0
D713 D1FS4A-TA
D714 D1FS4A-TA
D709 RDS.968-T1 PROTECT
D711 RDS.968-T1 PROTECT
Q701 SSMGN15FU (TE85R) LEVEL_CON V
Q704 SSMGN15FU (TE85R) LEVEL_CON V
Q709 SSMGN15FU (TE85R) LEVEL_CON V
Q706 DTC114EUA-T106 INV_SW
D701 1SS355 AN D
D703 1SS355 AND
CPU & PW ROM
CN702 12P
CN703 5P
(MAIN CPU)
B-SS1751-C-P8

V -A SIDE-
SUFFIX: -11

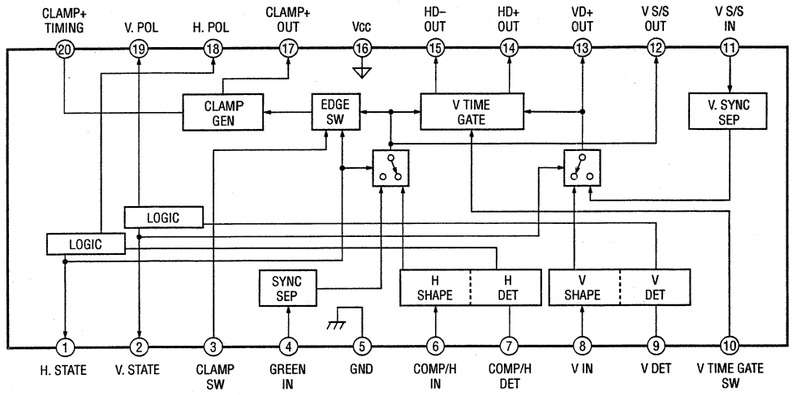


V -B SIDE-
SUFFIX: -11

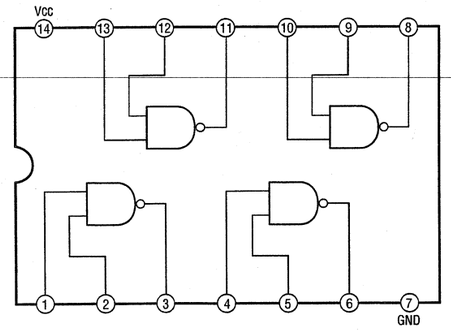
A | B | C | D | E | F | G | H


S-VIDEO
VIDEO
INPUT_A
AUDIO IN
IC903 MAX4382EUD-TG069 MON_OUT_DRV
IC904 SN75453BPSR SYNC_DRV
IC901 24LC21AT/SN DDC_EEPROM
IC902 TC74HC4052AFT (EL) DDC SW
IC908 TDA7309D013TR AUDIO_PROCESSOR
IC909 BA09FP-E2 9V REG
IC911 BA6288FS-E2 MOTOR DRIVE
IC912 ADXL202JE-REEL ACCELEROMETER
IC913 LMC7101BIM5X BUFFER
IC914 TPA2001D1PWR AUDIO_AM P
IC915 TC7MH125FK (TE85R) 3STATE_BUFF
Q904 DTC114EUA-T106 INV_SW
Q901 DTC114EUA-T106 INV_SW
Q903 DTC114EUA-T106 INV_SW
Q902 DTC114EUA-T106 INV_SW
D902 RD3.9SB-T1 PROTECT
D903 RD3.9SB-T1 PROTECT
D904 RD3.9SB-T1 PROTECT
D905 MA3J14700LSO PROTECT
D906 MA3J14700LSO PROTECT
D907 MA3J14700LSO PROTECT
D908 HN1D03FU-TE85R PROTECT
D909 DAN202UT106 OR
D910 RD9.1SB2-T1 PROTECT T
D911 RD9.1SB2-T1 PROTECT
D914 MA3J14700LSO PROTEC T
D915 MA3J14700LSO PROTEC T
D916 MA3J14700LSO PROTECT
D917 HN1D03FU-TE85R PROTECT
D901 NNCD5.6LG-T1 PROTECT
CN902 5P
CN901 15P
CN904 9P
CN905 5P
CN906 2P
J901
J902
TK901
TP901 XX
L901 1mH
L902 1mH
L903 1mH
FB901 100 1/10W
FB902 0ωR
FB903 0ωR
FB904 0ωR
FB905 0ωR
FB906 0ωR
SPEAKER
V_IN (TO P11)
Y_SYNC (TO P2)
(TO P2 P8)
(TO P8)
(TO P8) AU_MUT
(TO P8) POS_DET
TO Q BOARD CN1
TO S BOARD CN501
C (10/10)
(MONITOR OUT & AUDIO PROCESS)
B-SS1751-C-P10

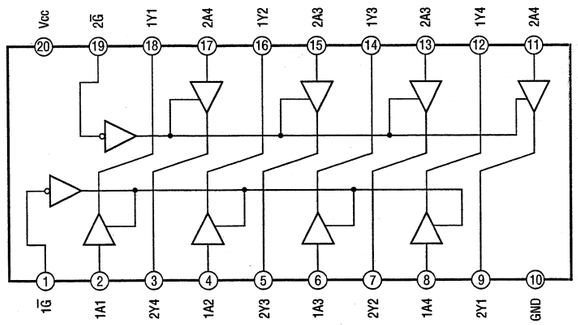
C (2/10) M52347FP-TE (IC202)



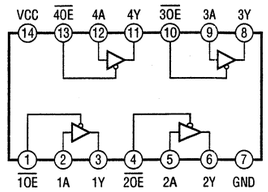
C (2/10) SN74LV00APWR (IC204)



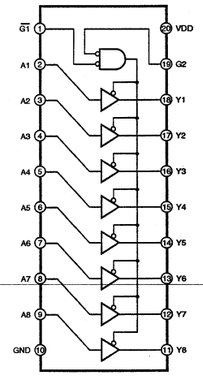
C (2/10) SN74LV244APWR (IC205)



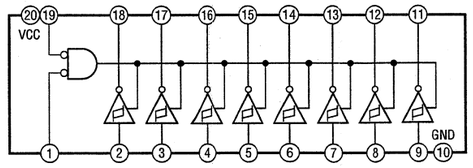
C (3/10) TC74LCX125FT(EL)(IC302)



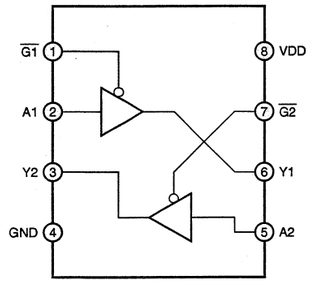
C (4/10) SN74AHCT541PWR (IC407, IC408, IC409)



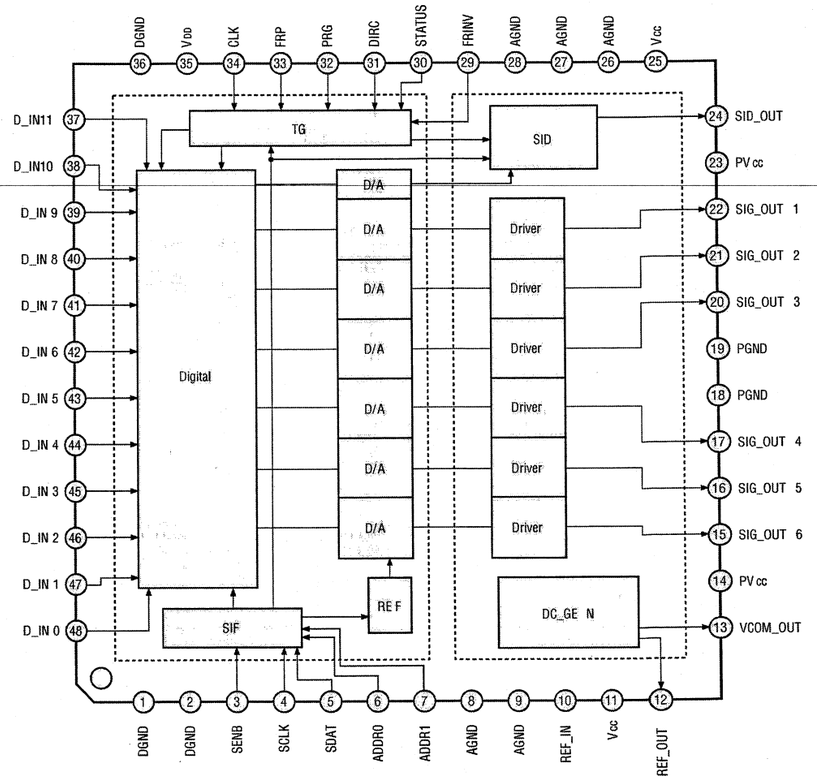
C (4/10) TC74VHCT540AFT(EL) (IC410)



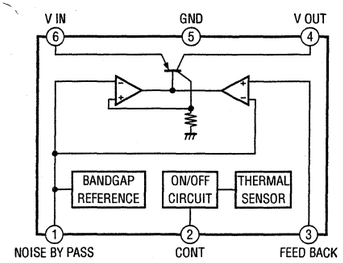
C (4/10) TC7WH125FK (IC402)



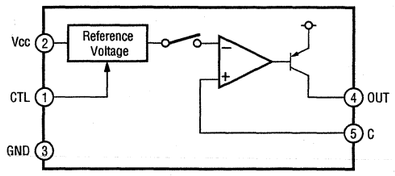
C (5/10, 6/10, 7/10) CXA7004 (IC501, IC601, IC651)



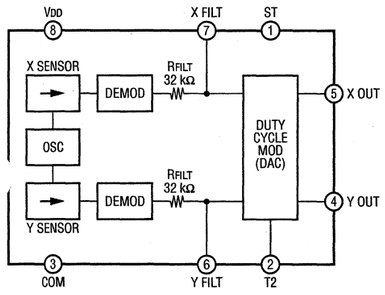
C (5/10) TK11900MTL (IC502)



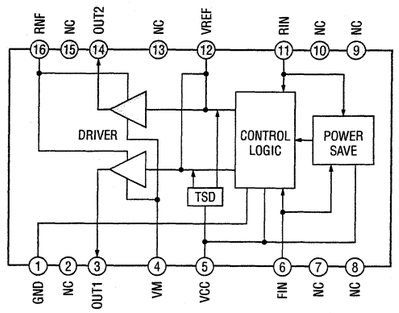
C (9/10) BA00ASFP-E2 (IC807, IC808, IC809)



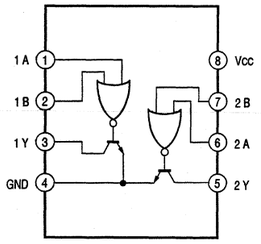
C (10/10) ADXL202JE-REEL (IC912)



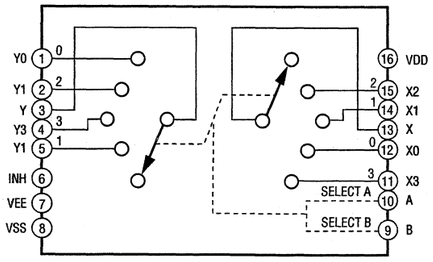
C (10/10) BA6288FS-E2 (IC911)



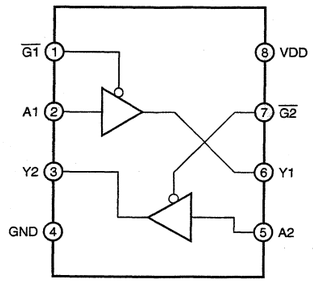
C (10/10) SN75453BPSR (IC904)



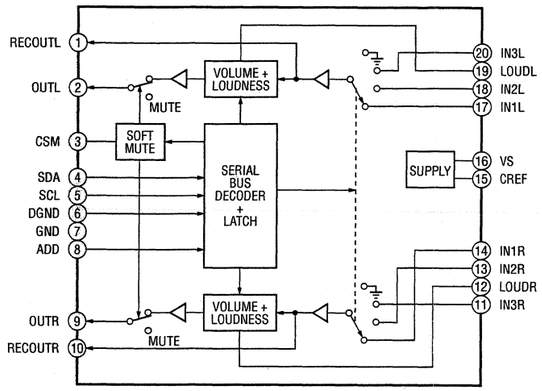
C (10/10) TC74HC4052AFT(EL) (IC902)



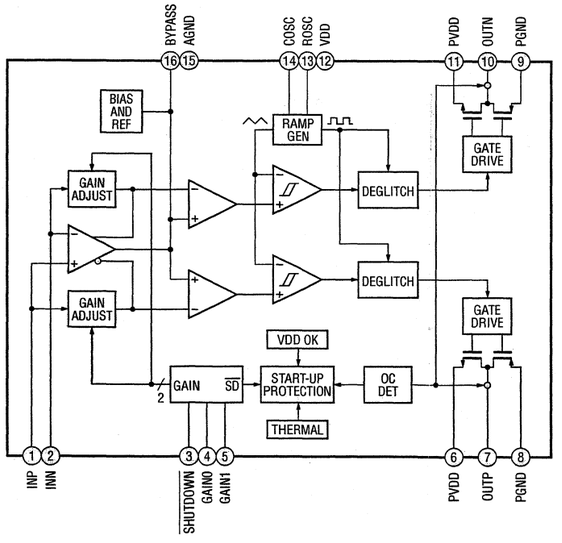
C (10/10) TC7WH125FK(TE85R) (IC915)

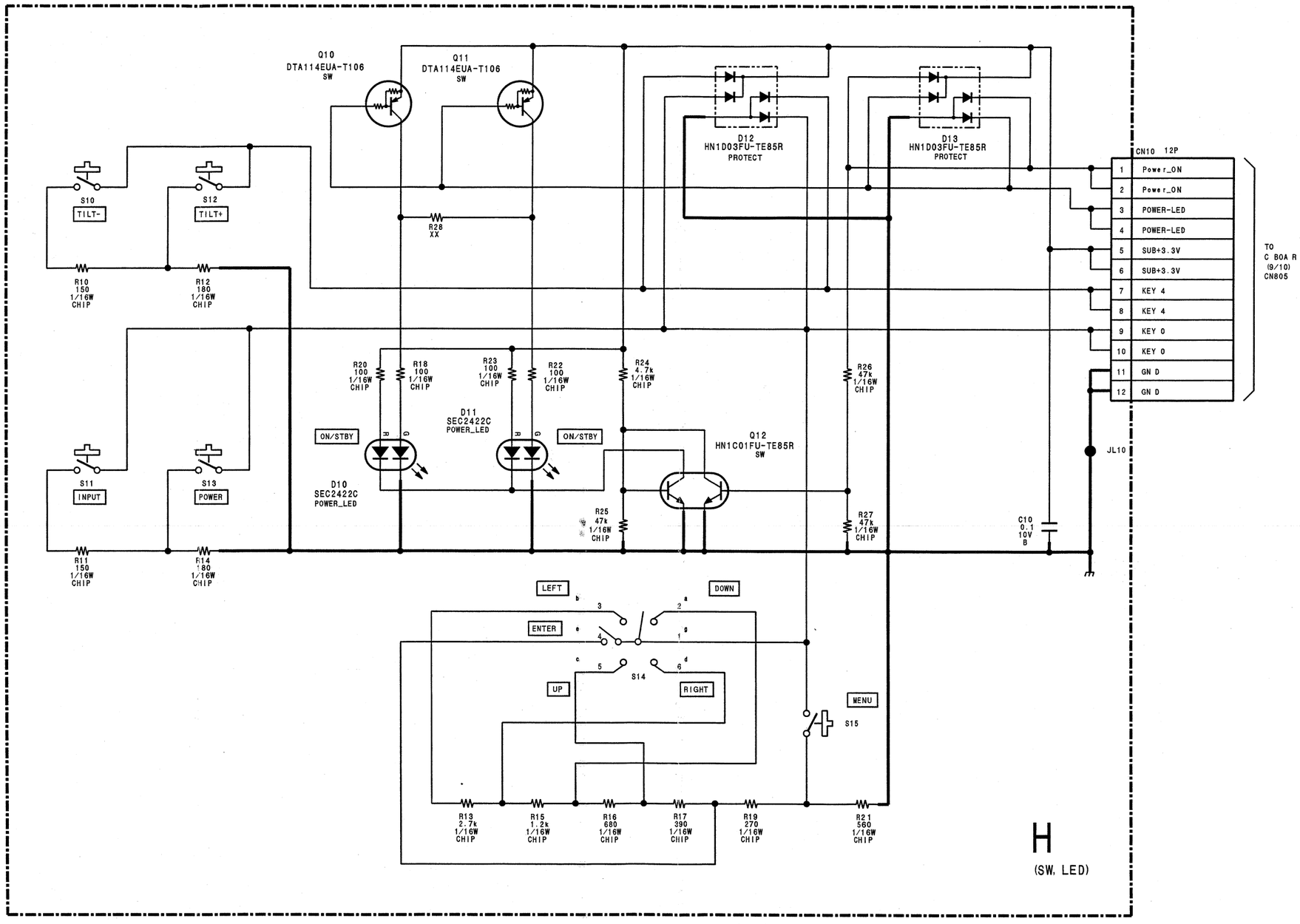


C (10/10) TDA7309D013TR (IC908)

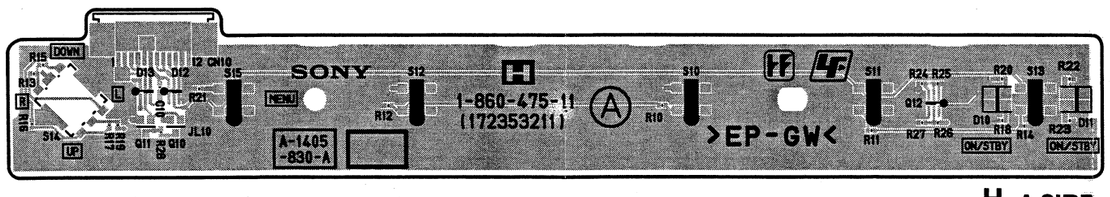


C (10/10) TPA2001D1PWR (IC914)

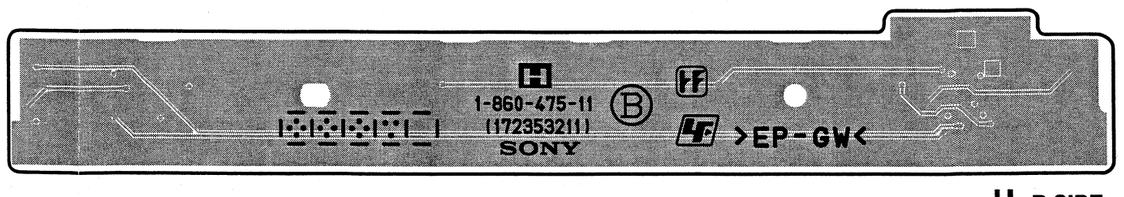




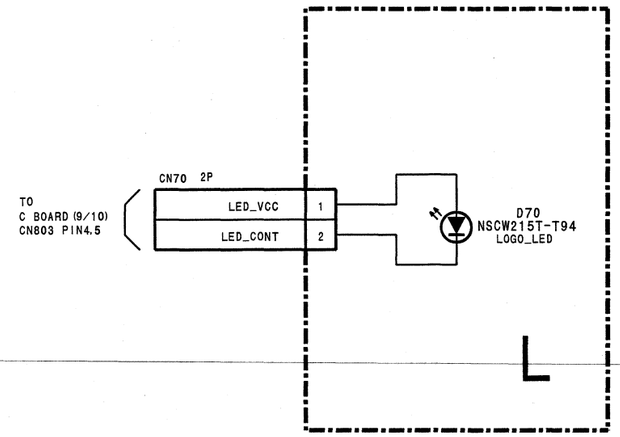
B-SS1751-H



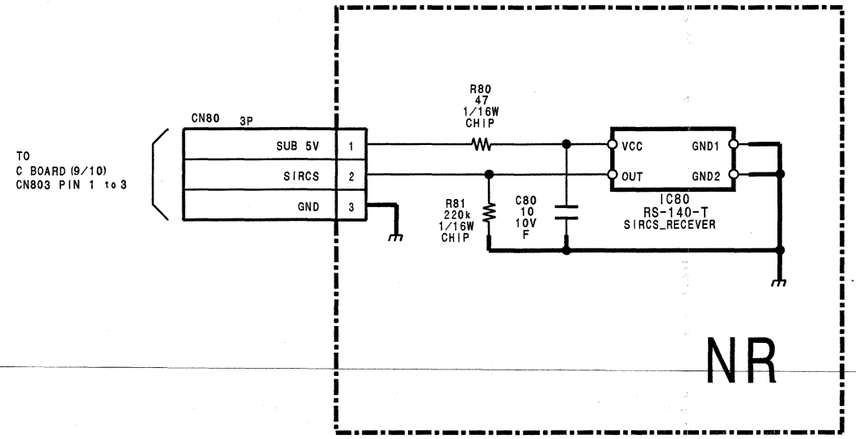
H -A SIDE-
SUFFIX: -11



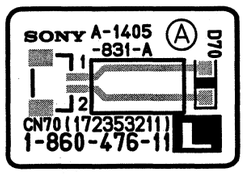
H -B SIDE-
SUFFIX: -11



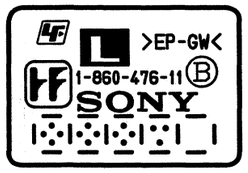
B-SS1751-L



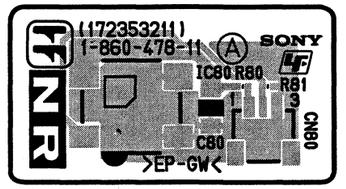
B-SS1751-NR



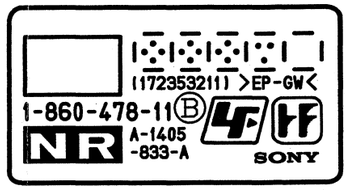
L -A SIDE-
SUFFIX: -11



L -B SIDE-
SUFFIX: -11

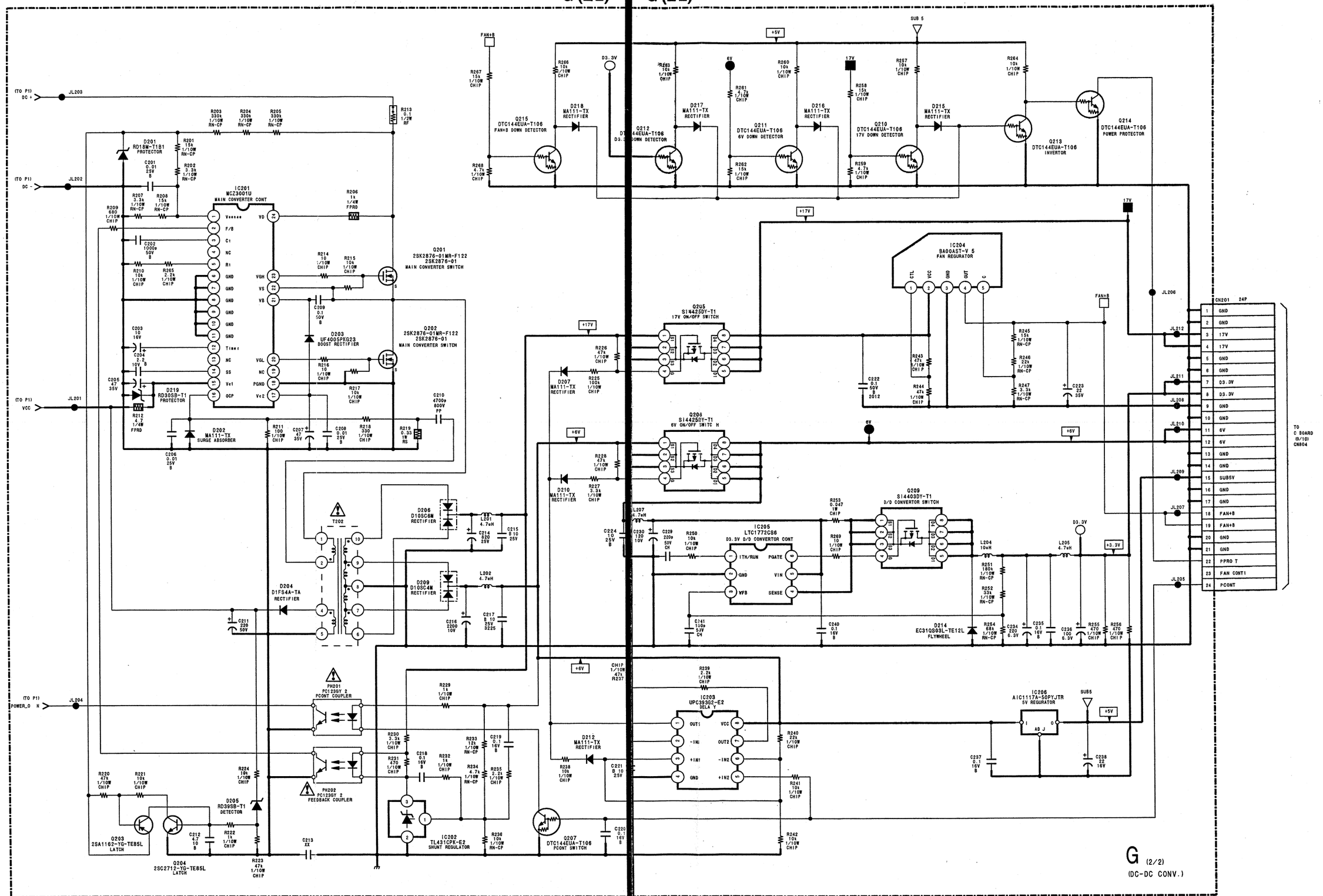


NR -A SIDE-
SUFFIX: -11



NR -B SIDE-
SUFFIX: -11

G (2/2)



A B C D E F G H

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer :

Check the metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA. Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

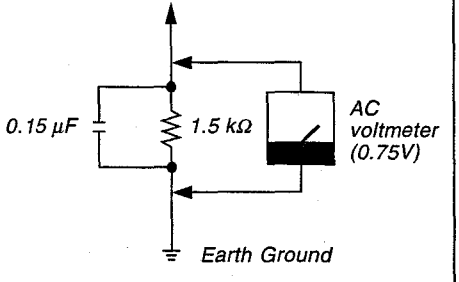


Fig A. Using an AC voltmeter to check AC leakage.